



gai consultants

Geotechnical and Environmental Exploration

5A and 7A Quench Towers
US Steel Clairton Works
Clairton, Pennsylvania

GAI Project Number: C071418.13
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Clairton, Pennsylvania

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. . . transforming ideas into reality

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1.0 INTRODUCTION

This report presents the results of a geotechnical and environmental exploration for the 5A and 7A low emissions quench towers and quench water settling basins to be built at the Clairton Works of United States Steel Corporation (USS) located in Clairton, Pennsylvania (PA). This report presents recommendations for the design of foundations for the proposed facilities. It also includes the results of testing for soil and groundwater characterization to assist in determining how to handle soil and groundwater excavated as a part of the foundation construction. No other environmental considerations are part of the scope of services for this project.

This exploration was requested and authorized by the USS of Pittsburgh, PA.

1.1 Site and Proposed Structures

The site is a level area at about elevation 760 feet [United States Geological Survey (USGS) Datum]. The centerline of the coke batteries has a plant north-south orientation. Quench tower 5A will be built north of existing coke battery 15 and quench tower 7A will be built north of existing coke battery 20. These will be constructed in an area formerly housing coke batteries 16, 17, and 21. The above grade portions of those batteries have been removed, leaving the below grade concrete foundations and possibly other demolition debris.

The attached Figure 1 shows the current plan of the proposed facilities. The quench towers will be about 160 feet high and occupy plan dimensions of about 40 feet by 30 feet. A two story mechanical/electrical building is to be attached to one side at the base of each tower. Preliminary estimates of average loading pressures are 5,000 pounds per square foot (PSF) for the quench towers and 500 PSF for the mechanical/electrical buildings.

The settling basins are to be reinforced concrete tanks occupying plan dimensions of about 50 feet by 215 feet. The basins will each have a concrete mat floor that is at grade on the northern ends and tapers to a depth of about 22 feet below grade near the centers of the structures. From there, the depth remains constant until the southern portions extend to about 29 feet below grade.

1.2 Regional Geology

The fill used to create a level site is underlain by alluvial soils deposited by the Monongahela River. These soils are made up of interbedded sand, gravel, silt and clay and can vary in thickness. The rock under the site is of Pennsylvanian age and part of the Glenshaw Formation of the Conemaugh Group. The Glenshaw Formation is made up of cyclic sequences of sandstone, shale, red beds, and thin limestones and coal.

2.0 SUBSURFACE EXPLORATION

2.1 Drilling Equipment and Methods

Pennsylvania Drilling of Imperial, PA drilled a total of six borings for the proposed facilities between October 31 and November 11, 2011. The approximate locations of the borings are shown on the attached Figure 1 and were established by measuring relative to existing facilities. The elevations of the tops of the borings were estimated based on a general plant grade elevation of 760 feet. GAI Consultants, Inc. (GAI) monitored the drilling and sampling in the field and classified the samples obtained. The field classification sheets are presented in Appendix A.

Borings B-1, B-4 and B-5 were drilled to targeted depths of about 50 feet each to obtain data for foundation design for the settling basins and to obtain data for possible design of excavation bracing systems. Boring B-2 was extended to a depth of only 35 feet because of a one foot thick steel obstruction encountered at a depth of 30 feet. These borings also included the installation of temporary two-inch diameter standpipes to depths of about 30 feet to obtain data on groundwater quality and levels, and to conduct rising head slug tests to provide data to assess dewatering requirements. Temporary monitoring well construction details are shown in Appendix B. Borings B-3 and B-6 were planned to be drilled 10 feet into rock to obtain data for the potential design of deep foundations for the quench towers. This was accomplished at Boring B-3; However, Boring B-6 hit an obstruction at a depth of about 11.5 feet that could not be penetrated. This boring was offset six times to attempt to bypass the obstruction to no avail. When B-6 could not be advanced to rock, the rig was returned to the location of nearby boring B-5. Boring B-5 was then augered to the top of rock, and 10 feet of rock core was obtained to provide data on the rock near the area of boring B-6.

Drilling was accomplished using a Central Mine Equipment (CME) 85 truck-mounted drill rig. Standard penetration tests (ASTM D1586) were conducted with an automatic hammer in conjunction with soil sampling at five-foot intervals through soil. Hollow stem augers were used to maintain an open drill hole between samples and/or to advance the borings between samples. The augers were also used to drill through existing concrete foundations where present at boring locations. A total of three auger bits and six sets of carbide teeth were consumed in drilling through concrete and rubble that were present in some locations. Upon soil sampling or auger refusal on rock, two of the borings were advanced into rock by coring with NQ2 wire line coring tools, which produce rock core approximately two inches in diameter.

During the drilling operations, GAI additionally monitored the breathing zone with a Multi-Rae meter equipped with an oxygen, lower explosive limit (LEL) and volatile organic compound (VOC) sensors to scan for any potential occurrences above background. Safe breathing air conditions were recorded during the work, based on the meter readings. Soil samples were also screened with the Photoionization Detector (PID meter) and the results are indicated in the remarks column on the field classification sheets in Appendix A. The relative concentrations of VOCs were not detected above background.

GAI collected soil samples at depths of six feet and at the groundwater table for chemical analysis for parameters listed under the PA Department of Environmental Protection (PaDEP), Bureau of Waste Management, Management of Fill - Clean Fill Concentration Limits for Organics Clean Fill Concentration Limits for Metals and Inorganics. A sample from B-6 was not obtained at the depth of groundwater because the boring was stopped by the obstruction[s] discussed previously. GAI also obtained samples of groundwater from the temporary monitoring wells for analysis for the parameters specified in the request for proposal by USS. Additionally, GAI used an oil-water interface probe to monitor for the occurrence of separate-phase hydrocarbons in the monitoring wells. No separate-phase hydrocarbons were detected. The purpose of obtaining the soil and water samples was for USS to assess if the soil and groundwater to be removed during the construction of the settling basins would require special provisions for waste management and/or disposal.

The excess soil cuttings and groundwater were placed in containers provided by USS for management and disposal by USS. Upon completion, the borings were backfilled to the ground surface with a water-cement grout. The temporary monitoring wells were grouted through the bottom of well casing to the ground surface. The PVC pipe that comprised the temporary monitoring wells were left in the borehole.

2.2 Soils

The borings encountered two primary soil horizons from the surface to the top of rock: fill and alluvium.

The uppermost fill layer was found in all borings. The fill ranged from 30 to 40 feet in thickness and generally consisted of slag, rock fragments, coke, silt, sand and gravel. Traces of metal, coal, and brick were also found, in addition to the old intact concrete foundations. The density of the fill ranged from very loose to very dense, but most of the fill was dense to very dense.

Natural deposits of alluvial sands, silts and clays were found below the fill. These soils ranged from 10 to 20 feet in thickness (where penetrated) and were very soft to very stiff where cohesive and very loose to dense where granular.

2.3 Rock

As previously noted the near surface rock encountered at the site is part of the Glenshaw Formation. This Formation generally consists of cyclic sequences of sandstone, shale, red beds, limestone and coal with the top of the Formation being identified by the fossiliferous Ames Limestone.

Borings B-1 and B-2 did not encounter rock upon completion. Boring B-3 encountered rock while augering at approximately 53 feet and was confirmed with a sample of soft to medium hard claystone at 54 feet. The boring was cored from 55 to 65 feet. The claystone was gray and gray with red mottling, slightly broken and moderately weathered.

Boring B-4 encountered red decomposed claystone at approximately 49 feet. The boring was terminated at a depth of 50 feet.

Top of rock in boring B-5 occurred at 50.5 feet. The rock was a soft gray highly weathered claystone to 52.3 feet underlain by medium hard, very broken to broken, moderate to slightly weathered siltstone to 60 feet.

2.4 Groundwater and Flooding

Groundwater level observations were made during soil sampling, after the borings were completed, and several hours after completion of the borings in some cases. The observations of soil moisture and measurements of groundwater depth are recorded on the field classification sheets in Appendix A.

The groundwater level measurements in all of the borings (except B-6, which was stopped by an obstruction at a depth of about 10 feet) indicated that the groundwater level is about 16 feet below grade at about elevation 744 feet. Based on GAI's previous site investigation, the normal pool level of the nearby Monongahela River is about elevation 722 feet. The site is above the level of the Monongahela River and groundwater levels may fluctuate with the level of the adjacent Monongahela River.

The water level in B-3 was taken before coring and was measured at 27 feet below grade; however, it is believed that the augers prevented water from entering the hole as the soil samples obtained at higher levels were saturated. Therefore, the water level measurement obtained in B-3 is considered not to reflect the true groundwater level and the saturated soils noted at 16 feet were used to determine the approximate level.

Water level measurements have been made in the borings at the times and under the conditions indicated herein. It should be noted, however, that groundwater conditions will

change due to variations in conditions such as rainfall, temperature, flooding, site grading, or other conditions not evident at the time of this exploration. Those preparing design drawings, specifications, and construction plans should anticipate that such variations will occur.

2.5 Slug Testing

GAI performed rising head slug tests in borings B-1, B-2, B-4 and B-5 to obtain data to estimate the hydraulic conductivity of the soils in the zone that may have to be dewatered during construction of the settling basins. The settling basins are projected to extend to as much as 29 feet below grade, and therefore the temporary monitoring wells were extended about 30 feet below grade to test the primary soils affecting the zone of proposed dewatering. The results of the testing may be used to assist in selecting the appropriate dewatering methods and the pumping rates needed to dewater the excavation.

The tests were conducted by lowering pressure transducers to the bottoms of the wells and then rapidly lowering the water level by removing a known volume of water from the well with bailers. The pressure transducers were connected to a laptop computer to continuously record the pressures fluctuation during and after the removal of water, to measure the rate of recovery of the well to the normal groundwater level. This data was then used to calculate the hydraulic conductivity of the soils involved in the tests.

Approximations of the hydraulic conductivity were conducted by GAI using AQTESOLV Version 4.5 computer software utilizing the Bouwer-Rice methodologies. The results of the slug testing and data analysis are summarized in Table 1. These tests indicate that the granular fills in the areas of both settling basins have hydraulic conductivity ranging from 0.02 to 0.03 centimeters per second (cm/sec) with an overall average of $k = 0.02$ cm/sec.

2.6 Site Seismic Coefficients

The site seismic class was assessed based on the findings of the three borings that penetrated to rock in the vicinity of the quench towers using the criteria in the 2009 International Building Code. The results indicated that the site class in the area of this project is D, a stiff soil profile. This site class is applicable for shallow or deep foundations for this project. For site class D, the following are the recommended values for seismic design for these structures:

- S_1 , is 0.05g, For a one-second period
- Site coefficient, F_v , is 2.4
- S_s , is 0.13g, For a 0.2-second period
- Site coefficient, F_a , is 1.6

3.0 LABORATORY TESTING

GAI performed environmental soil and groundwater sampling during the drilling investigation as requested by USS. GAI obtained a total of 11 samples of soil for chemical analysis for parameters listed under the PaDEP, Bureau of Waste Management, "Management of Fill set forth August 2010 listed on PaDEP Table FP-1a" Clean Fill Concentration Limits for Organics" and Table FP-1b "Clean Fill Concentration Limits for Metals and Inorganics." In addition to comparing the results to the Clean Fill Limits, results were also compared to PaDEP Land Recycling Program (ACT 2), Statewide Health Standards (published January 8, 2011), Medium-Specific Concentrations (MSCs) for Organic and Inorganic Substances in Soil. The MSCs standards used were Nonuse Aquifer, Non-Residential.

GAI also obtained four samples of groundwater from the four temporary monitoring wells MW-1, MW-2, MW-4 and MW-5 for testing for the parameters specified by USS. Sample collection records summarizing field water quality data monitored during sampling are provided in Tables 2A through 2D. GAI properly collected, stored and transported the samples to our subcontracted chemical laboratory, Test America Laboratories, Inc. of Pittsburgh, PA, for the specified testing.

The results of the laboratory testing reports are included in Appendix C. GAI summarized the laboratory data and has presented the information on Table 3A and 3B - Soil Laboratory Data Summary and Table 4 - Groundwater Laboratory Data Summary.

GAI also requested testing for the corrosion potential of the other soil samples from our subcontracted geotechnical laboratory, Geotechnics, of East Pittsburgh, PA. The testing included soil pH, Sulfates, Chlorides, and resistivity. We also requested grain size analyses of the fill for comparison with the results of the slug tests. The results of the testing for the corrosion potential of the soil samples and of the grain size analyses for the fill are included in Appendix D.

GAI did not do any additional laboratory testing for the geotechnical properties of the soils or rock, because the materials encountered during this exploration are similar to those encountered by GAI for previous explorations at the Clairton Works. Thus, our recommendations for geotechnical parameters for use in design of the new facilities are based on previous testing of samples from the Clairton Works.

4.0 SPECIFIC STRUCTURE FOUNDATION RECOMMENDATIONS

4.1 Quench Towers

The quenching towers will be about 160 feet tall and occupy an area about 40 by 30 feet in plan dimensions. A two-story mechanical/electrical building is attached to one side at the base of each tower. Preliminary estimates of average loading pressure are 5,000 PSF for the quench towers and 500 PSF for the mechanical/electrical buildings.

The findings of Borings B-3 and B-5, the closest borings to rock in the vicinities of these towers, were used to estimate the potential settlements of the towers and the adjacent mechanical electrical buildings. Based on the data from these borings, the towers are estimated to settle two to three inches assuming a uniform loading of 5,000 PSF across the projected base area of the towers. The settlements of the towers would be on the order of about one inch if dense fill extended to the top of rock. However, there is a layer of compressible alluvium below the fill that is contributing to the settlement under the anticipated foundation pressures. With the understanding that two to three inches of settlement is considered excessive, it will be necessary to either improve the stiffness of the compressible soils below the structure or to use deep foundations to rock to reduce settlements to tolerable values. Having assessed these options in the past for other structures for the Coke Battery C project, we anticipate that deep foundations to rock offer the best combination of reliability and economy. Thus, deep foundations to rock are recommended to support the quench towers.

The borings for this exploration indicate that the fill is generally dense to very dense and that it is at least 30 feet thick in the areas of the proposed mechanical/electrical buildings. These buildings will attach on one side to the quench towers. To minimize differential settlements between these structures, it is recommended that the mechanical/electrical buildings be supported on the same deep foundation type as used for the quench towers. The lowest floor slab can be a slab on grade.

There are many types of deep foundations that could be used for these structures. The type that has been found cost-effective for many of the facilities for the Coke Battery C project is augered cast-in-place piles, also called augercast piles. Specific recommendations for the design and installation of augercast piles are presented in a later section of this report.

4.2 Quench Station Settling Basins

The settling basins are to be reinforced concrete tanks occupying plan dimensions of about 50 feet by 215 feet and will extend from zero to 29 feet below grade. Since there should be no or little net stress increase due to the weight of these structures, settlements should be negligible on the dense granular fill.

The design of the walls of the structures should be in accordance with the recommendations presented under “Lateral Earth Pressures.”

Another consideration for the design and construction of the basins will be the uplift pressures on the base of the structure due to the groundwater level. The basins will have to be designed with sufficient weight or supplemental ground anchors to resist the uplift pressures from the highest possible groundwater levels that may occur when the basins are empty. If ground anchors are needed, consider using augercast piles as ground anchors. Alternately, automatic one-way valves may be included in the structure, if needed, to prevent excessive uplift groundwater pressures. If ground anchors are required, please contact GAI once the approximate load requirements and spacing are known, so that we may provide recommendations for designing the ground anchors.

5.0 GENERAL FOUNDATION RECOMMENDATIONS

The site contains fill to depths of 30 to 40 feet in the project area. The fill is mostly granular slag and appears to be mostly dense to very dense in the project area, although loose areas are also present in the fill. Old foundations, structures, or sewers and old structural debris including steel are present in the fill in the project area. Hard objects that will be difficult to excavate or penetrate, such as the one-foot thickness of steel found at a depth of 30 feet in Boring B-2, may be encountered during foundation construction. Test pits or pre-drilling, either before or during construction, may be needed to determine the exact locations of obstructions and/or existing utilities and their potential impacts on foundation construction.

5.1 Augercast Piles

Augercast piles are suitable for support of the quench towers. Prior to using augercast piles, remove any obstructions and old foundations that would prohibit their installation. Pre-drilling through fill may also be required at the locations of the augercast piles to remove deep obstructions. The augercast piles should be installed to auger refusal (penetration rate less than one foot per minute) at or below the elevation of the top of rock as defined by the borings to achieve full compression and uplift capacity. Where soft rock is present, the auger refusal may occur below the top of rock. Where harder rock is present, the auger refusal may occur at the top of rock.

Augercast piles should be a minimum of 18 inches in diameter and should be designed for an allowable grout strength no higher than 0.33f_c. The minimum pile spacing should be three pile diameters from center to center. Recommended maximum design capacities for suitably reinforced augercast piles installed from above elevation 655 feet to auger refusal in rock are as follows:

Diameter (Inches)	Grout Unconfined Compressive Strength (psi)	Allowable Compressive Load (tons)	Allowable Tension Capacity* (tons)	Allowable Lateral Capacity* (tons)	Allowable Lateral Capacity** (tons)
18	5,000	210	22	4	8

Notes:

- * Augercast piles with a full length central #10 Grade 60 reinforcing bar are estimated to move less than one inch for the indicated loads. The full-length reinforcing steel should be all-thread bars with threaded mechanical couplers designed by the manufacturer to transmit the full strength of the bar. If lateral loads in excess of those indicated for single bar reinforcement will be applied to the piles, consider using batter piles to resist the lateral loads. It is recommended that the batter not exceed 1H:5V.
- ** Alternately include a reinforcing cage installed to a depth of 15 feet designed to resist the lateral loads, in addition to the full length all-thread bar. The minimum reinforcing cage should consist of six #8 Grade 60 reinforcing bars with #4 ties at 12-inch centers to increase the allowable lateral load capacities to those shown in the right column of the table above. GAI should be permitted to review the preliminary pile layouts to determine if reductions in lateral load capacity are needed due to group action.

The load capacities and deflections of augercast piles should be verified by load tests conducted in accordance with ASTM D-1143 for compressive capacity, ASTM D-3689 for tension capacity, and ASTM D-3966 for lateral capacity. Since the above recommended capacities, geometry, and reinforcing have been verified with load tests for the Coke Battery C project, they may be used for the design of the augercast piles for the two new quench towers. If other capacities or geometries are desired for the pile designs for the quench towers, GAI should be informed so that we can determine if additional load testing will be required.

Specifications for augercast piles are included in Appendix E to assist in preparation of the foundation construction specifications for this project.

Augercast piles that contain a single all-thread bar and are not subjected to uplift loads are frequently embedded at least six inches into the reinforced concrete pile cap, and the all-thread bars extend an additional six inches above the tops of the piles. If uplift must be resisted by the piles, the all-thread bar is usually extended high enough into the pile cap to fully develop the capacity of the bar, either with or without a positive shear transfer device (steel plate and/or nut) at the top of the extended all-thread bar. The actual connection detail should be developed by the pile cap designer as required for the project to properly transmit the loads through the cap to the piles.

5.2 Corrosion Mitigation

Type II cement should be used in concrete and grout for shallow and deep foundations to provide resistance to sulfates. Reinforced concrete foundations should have at least three inches of cover over the reinforcing to reduce exposure and corrosion of the reinforcing steel. Epoxy coating should be used on the bars in augercast piles (which are more susceptible to micro-cracking than pile caps and drilled shafts) to enhance the corrosion resistance of the reinforcing steel.

5.3 Temporary Excavations

Temporary excavation slopes should not be steeper than permitted by OSHA. Temporary excavation slopes should not be steeper than 1.5H:1V.

The excavations for the settling basins that extend below the level of groundwater will probably require an excavation bracing system. Potential systems to be considered might include a driven sheet pile wall, a soldier beam and lagging wall, a ground freezing wall, a jet grouted wall, a tangent caisson wall, a tangent augercast pile wall, and possibly others. The selection of the best option for these locations will be a function of the amount of space available around the excavation to allow sloped excavations. Some of these options (such as tangent caissons walls) may serve as or be incorporated into the permanent walls of the basins. The selected method will have to be able to be installed through random obstructions like the steel encountered at a depth of 30 feet in Boring B-2.

GAI anticipates that the desired approach may include the initial removal of the existing foundations and remnants of former structures to a depth of 10 to 15 feet using open excavation techniques. After the primary obstructions have been removed, then a suitable wall system could be installed from the base of the excavation to the depth needed to construct the settling basins.

Since these excavations will extend below the level of ground water, it will be important to determine the appropriate dewatering system in conjunctions with the design of the excavation bracing system. This is so that the bases of the excavations are not destabilized due to ground water seepage, flows or pressures, and to prevent collapse or excessive movement of walls extending below the ground water.

5.4 Excavation Dewatering

The excavations for the settling basins will require dewatering. The type of system will depend upon the finished geometry of the temporary excavation system and the type of excavation support used. The parameters determined from the slug testing may be used to assist in the design the final excavation dewatering system. However, we estimate that a sustained pumping rate of 250 to 1,000 gallons per minute will be required to maintain the groundwater two feet below the base of the excavation, assuming that the lowest base is at elevation 731 feet, that the excavation bracing system does not block seepage below the base of the excavation, and excluding rain water and any surface runoff.

Systems that may be used to dewater these excavations include deep wells, well points, and sumps with pumps. Any of these systems should be designed to lower the water to at least two feet below the base of the excavation to provide a stable dry surface upon which to work and construct the basin foundations. The appropriate type of dewatering system will depend on the type of excavation bracing system selected.

5.5 Lateral Earth Pressures

Retaining walls for the settling basins should be designed for lateral loads based on a soil moist unit weight of 135 pounds per cubic foot (PCF) above the level of groundwater and for a submerged unit weight of 73 PCF below the level of groundwater. The non-yielding walls of the basins should be designed for an "at rest" lateral earth pressure coefficient of 0.5. Backfill around the permanent retaining walls should not be over-compacted to prevent excess lateral earth pressure against the walls. A coefficient of friction of 0.5 may be assigned between the base of concrete foundations and a well compacted granular subgrade. Based on the borings, it is anticipated that granular soils will be present at the bases of the foundations. If

cohesive soils are encountered at the finished subgrade, over-excavate an additional 12 inches and replace the overexcavated soils with free draining, hard, durable aggregate, such as PA Department of Transportation (PennDOT) (Publication 408) Type A crushed limestone having an AASHTO #57 gradation. An active earth pressure coefficient of 0.3 and a passive earth pressure coefficient of 3.0 should be used for design of temporary deflectable walls in the existing site fill. The above recommendations assume that the ground surfaces around the walls are level. Surcharge loads and sloping ground surfaces (if any) must be considered in the design. Any unbalanced water pressure must also be included in the wall design.

If temporary retaining structures extend into the alluvium below the fill, the lateral earth pressures in the alluvium may be evaluated based on a moist unit weight of 125 PCF, a submerged unit weight of 63 PCF, a coefficient of active earth pressure of 0.5, and a coefficient of passive earth pressure of 2.0.

5.6 Subgrades for Concrete Mats and Floor Slabs

The subgrades for mats and floor slabs should be proof rolled with five passes of the 20-ton roller and any soft or loose soils replaced with well compacted granular backfill. The finished subgrades should be compacted to 100 percent of the maximum dry density according to ASTM D698. Subgrades so prepared for these structures and locations in dense fill may be assigned a subgrade modulus of 400 kips per cubic foot for a one-foot square plate. The subgrade modulus must be adjusted as appropriate for the width of the loaded area.

5.7 Shallow Foundations

Shallow foundations are feasible for support of ancillary structures in the immediate vicinity of the primary structures of this project, provided that some settlement is considered tolerable and that the subgrade is improved as recommended herein. Foundations exposed to freezing temperatures should bear a minimum of three feet below finished grade to reduce the probability of damage due to frost heave. Shallow foundations supported on medium dense to very dense granular fill may be sized for a maximum design gross bearing pressure of 2,000 PSF. This design pressure is for the combined effects of dead and frequently applied live loads. The value may be increased by 33 percent for the combined effects of infrequent events. The minimum footing width should be two feet. Footings so designed are estimated to settle about one inch. If two inches of settlement is considered tolerable, then the allowable bearing pressure may be increased to 4,000 PSF. These recommended allowable design pressures are for relatively light facilities and for footings ranging from two to six feet in width.

The subgrades for shallow foundations should be examined and probed to determine if any soft or loose zones are present within one footing width below the base of the foundation. Any soft or loose zones should be removed and replaced with suitable site soils compacted to 100 percent of the maximum dry density according to ASTM D698. If the weather is not conducive to using site soils because they are too wet for compaction, then free draining, hard, durable aggregate, such as PennDOT (Publication 408) Type A crushed limestone having an AASHTO #57 gradation, should be used to backfill below foundations. The #57 backfill should be placed in 12-inch loose lift thicknesses and compacted using vibratory compaction to non movement under the action of the compaction equipment. The bases of all footing excavations should be free of loose or soft material, frozen soil, or water prior to placing concrete.

5.8 Drilled Shaft at Wall

A drilled shaft foundation has been proposed to support a pipe rack that must be built in the area of an existing retaining wall with stringent traffic access requirements. The discussion of the need for and the location of this foundation is presented in Appendix E. GAI recommends that the drilled shaft foundation be a minimum of 18 inches in diameter and have a minimum embedment of six feet below the lowest grade to have sufficient geotechnical capacity to support the proposed loads, with the anticipated movements being small and tolerable. A larger diameter may be used as needed to accommodate the reinforcing cage in the drilled shaft and the anchor bolts.

6.0 DESIGN REVIEW

This report has been prepared to aid in the design of the foundations for this project. Its scope is limited to the specific project and location described herein and represents our understanding of the significant aspects relative to soil and foundation considerations. If there are differences in the locations of the proposed facilities and/or design features from those described herein, GAI should be informed so we may, if necessary, modify or revise our recommendations and determine if additional exploration, testing and analyses are warranted prior to final design of the foundations for the facilities. These recommendations are contingent upon GAI being permitted to review and provide inputs to the foundation construction plans and specifications before they are finalized. GAI should monitor any additional exploration, subgrade preparation, backfilling, foundation construction, and load testing, so that these aspects of the project are constructed according to the intent of our recommendations and so that any unanticipated foundation conditions might be recognized and properly reconciled.

Respectfully submitted,
GAI Consultants, Inc.



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FBN:RDG/jab
07141813-dr-gee-rpt-fbn/jab d-1

TABLES

TABLE 1 : Summary of Slug Test Results
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Boring	Test #	Test Date	Hydraulic Conductivity, K (feet per day)	Hydraulic Conductivity, K (cm/sec)
B-1	1	11/9/2011	48.22	2.E-02
	2	11/9/2011	53.04	2.E-02
	3	11/9/2011	36.75	1.E-02
	Geometric Mean ¹ :		45.47	2.E-02
	Standard Deviation ² :		8.37	3.E-03
B-2	1	11/9/2011	Test Invalid ³	---
	2	11/9/2011	Test Invalid ³	---
	3	11/9/2011	95.4	3.E-02
	Geometric Mean ¹ :		95.4	3.E-02
	Standard Deviation ² :		---	---
B-4	1	11/9/2011	27.35	1.E-02
	2	11/9/2011	75.97	3.E-02
	3	11/9/2011	114.5	4.E-02
	Geometric Mean ¹ :		61.96	2.E-02
	Standard Deviation ² :		43.67	2.E-02
B-5	1	11/9/2011	60.08	2.E-02
	2	11/9/2011	63.88	2.E-02
	Geometric Mean ¹ :		61.95	2.E-02
	Standard Deviation ² :		2.69	9.E-04
			Overall Average:	2.E-02
			Standard Deviation	1.E-02

Footnotes:

1. Geometric Mean provides the averaged values from multiple tests.
2. Standard Deviation provides a measure of variation among the tests.
3. Test Invalid indicates that slug test results were inconclusive.

Notes:

1. Calculations performed using AQTESOLV Version 4.5 utilizing Bouwer-Rice methodologies.

TABLE 2A : Groundwater Sample Collection Record

United State Steel Corporation
Clariton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

GAI Project: C071418.13 Site: U.S. Steel-Clairton Well No.: B-1 Date: 11/9/2011
 Well Depth: 30' Screen Length: 20' Well Diameter: 2" Casing Type: PVC
 Sampling Device: Peristaltic Tubing Size 1/4" Water Level: 16.15'
 Measuring Point : Ground Surface Other Information : Temporary Well
 Sampling Personnel RDG

Time (min)	pH	Temp (deg C)	Specific Cond (mS·cm-1)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	OPR (mV)	Notes
0	10.58	20.76	1.99	0.00	17.0	-278	
3	10.57	20.82	1.96	0.00	15.9	-282	
6	10.55	20.79	1.94	0.00	14.0	-285	
9	10.54	20.80	1.94	0.00	13.4	-285	
12	10.50	20.03	1.95	0.00	11.7	-279	
15	10.47	19.79	1.94	0.00	11.5	-276	
18	10.49	19.80	1.96	0.00	11.4	-275	
21	10.46	19.79	1.96	0.00	10.9	-278	
		Sample B-1W 11/9/11					

Type of Samples Collected

Various

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: Volcyl = Br2h, Volsphere = 4/3B r3

TABLE 2B : Groundwater Sample Collection Record

United State Steel Corporation
 Clariton Works, Clairton, Pennsylvania
 Proposed 5A and 7A Quench Towers
 GAI Project No. C071418.13

GAI Project: C071418.13 Site: U.S. Steel-Clairton Well No.: B-2 Date: 11/9/2011
 Well Depth: 30' Screen Length: 20' Well Diameter: 2" Casing Type: PVC
 Sampling Device: Peristaltic Tubing Size 1/4" Water Level: 16.16'
 Measuring Point : Ground Surface Other Information : Temporary Well
 Sampling Personnel RDG

Time (min)	pH	Temp (deg C)	Specific Cond (mS·cm-1)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	OPR (mV)	Notes
0	11.13	17.44	0.898	0.00	34.4	-236	
3	11.16	17.62	0.895	0.00	23.7	-248	
6	11.17	17.74	0.892	0.00	18.8	-254	
9	11.20	17.85	0.893	0.00	14.7	-260	
12	11.20	17.93	0.891	0.00	13.1	-262	
15	11.24	17.18	0.894	0.00	10.3	-270	
18	11.26	18.29	0.896	0.00	8.8	-273	
20	11.36	18.50	0.909	0.00	7.4	-281	
25	11.43	18.69	0.925	0.00	6.4	-285	
30	11.43	18.72	0.927	0.00	6.2	-287	
35	11.45	18.74	0.927	0.00	6.3	-290	
		Sample B-2W 11/9/11					

Type of Samples Collected

Various

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: Volcyl = Br2h, Volsphere = 4/3B r3

TABLE 2C : Groundwater Sample Collection Record

**United State Steel Corporation
Clariton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13**

GAI Project: C071418.13 Site: U.S. Steel-Clairton Well No.: B-4 Date: 11/8/2011
 Well Depth: 30' Screen Length: 20' Well Diameter: 2" Casing Type: PVC
 Sampling Device: Peristaltic Tubing Size 1/4" Water Level: 16.23'
 Measuring Point : Ground Surface Other Information : Temporary Well
 Sampling Personnel RDG

Time (min)	pH	Temp (deg C)	Specific Cond (mS·cm-1)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	OPR (mV)	Notes
0	12.59	19.52	2.57	0.00	10.6	-305	
3	12.65	19.31	2.61	0.00	13.7	-324	
6	12.69	19.28	2.62	0.00	10.7	-345	
9	12.70	19.21	2.63	0.00	10.2	-348	
12	12.70	19.16	2.63	0.00	9.6	-349	
15	12.70	19.11	2.63	0.00	8.8	-349	
18	12.70	18.97	2.63	0.00	8.5	-347	
20	12.70	19.01	2.63	0.00	8.1	-346	
23	12.70	19.02	2.63	0.00	8.3	-343	
26	12.70	19.00	2.63	0.00	8.1	-339	
		Sample B-4W 11/8/11					

Type of Samples Collected

Various

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: Volcyl = Br2h, Volsphere = 4/3B r3

TABLE 2D : Groundwater Sample Collection Record
United State Steel Corporation
Clariton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

GAI Project: C071418.13 Site: U.S. Steel-Clairton Well No.: B-5 Date: 11/8/2011
 Well Depth: 30' Screen Length: 20' Well Diameter: 2" Casing Type: PVC
 Sampling Device: Peristaltic Tubing Size 1/4" Water Level: 16.10'
 Measuring Point : Ground Surface Other Information : Temporary Well
 Sampling Personnel RDG

Time (min)	pH	Temp (deg C)	Specific Cond (mS·cm-1)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	OPR (mV)	Notes
0	12.37	19.18	2.69	0.10	5.1	-296	
3	12.53	19.10	2.69	0.00	5.2	-332	
6	12.59	19.10	2.70	0.00	5.0	-367	
9	12.62	19.03	2.71	0.00	5.0	-405	
12	12.62	19.12	2.70	0.00	5.1	-423	
15	12.60	19.04	2.70	0.00	5.1	-434	
18	12.62	19.12	2.70	0.00	5.1	-440	
20	12.62	19.04	2.70	0.00	5.1	-445	
		Sample B-5W 11/8/11					

Type of Samples Collected

Various

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: Volcyl = Br2h, Volsphere = 4/3B r3

TABLE 3A : Soil Laboratory Analytical Data Summary
Clean Fill Standards
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Clean Fill Limit ¹	Soil Samples Collected										
			B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3 (16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
Metals													
Antimony	mg/kg	27	<1.1	<1.1	<1.3	<1.2	0.38 J	<1.1	<1.1	<1.2	<1.1	<1.1	0.89 J
Arsenic	mg/kg	12	1.0 J	5.1	3.6	2.8	5.1	1.4	0.51 J	1.2	4.0	1.8	4.6
Barium	mg/kg	8,200	320 B	220 B	1,500 B	360 B	260 B	220 B	53 B	280 B	290 B	210 B	140 B
Beryllium	mg/kg	320	5.3 B	4.3 B	3.1 B	4.7 B	4.9 B	4.7 B	0.98 B	5.5 B	4.6 B	4.5 B	3.5 B
Boron	mg/kg	6.7	110	81	59	87	86	110	20 J	94	78	88	33
Cadmium	mg/kg	38	<0.55	0.23 J	0.046 J	0.051 J	<0.56	<0.54	<0.56	<0.59	0.10 J	<0.55	0.75
Chromium	mg/kg	94	1.8	5.3	10	4.8	16 B	5.4 B	1.1	2.3	5.8	13	28
Cobalt	mg/kg	8.1	<5.5	1.6 J	0.77 J	0.55 J	1.8 J	<5.4	0.17 J	<5.9	1.7 J	0.29 J	3.0 J
Copper	mg/kg	8,200	1.9 J	3.5	8.5	5.1	13	0.83 J	0.60 J	0.81 J	6.1	15	31
Lead	mg/kg	450	0.25 J	0.80	28	1.2	12	0.61	0.82	<0.36	7.2	0.30 J	140
Manganese	mg/kg	31,000	3,100 B	4,000 B	6,600 B	2,000 B	2,100	2,900	580 B	3,400 B	4,100 B	2,800 B	2,000 B
Mercury	mg/kg	10	<0.035	<0.038	0.018 J	<0.040	0.14	0.013 J	0.014 J	<0.037	0.019 J	<0.036	1.6
Nickel	mg/kg	650	<4.4	2.2 J	4.3 J	1.8 J	9.3	0.68 J	0.49 J	<4.7	3.6 J	4.1J	17
Selenium	mg/kg	26	3.0	1.7	<3.3	1.7	3.4	2.4	0.38 J	1.4	1.1	0.94 J	0.81
Silver	mg/kg	84	<1.1	<1.1	<3.3	<0.58	<0.56	<1.1	<0.56	<1.2	<1.1	<1.1	<0.56
Thallium	mg/kg	14	<2.2	<2.2	<6.6	<1.2	<1.1	<2.2	0.27 J	<2.4	<2.1	<2.2	<1.1
Tin	mg/kg	240	1.0 J	1.3 J	2.8 J	1.2 J	1.9 J	0.87 J	<11	1.2 J	2.0 J	1.9 J	2.3 J
Vanadium	mg/kg	1,500	2.8 J	13	6.8	5.6 J	7.5	11	1.9 J	5.7 J	10	5.8	11
Zinc	mg/kg	12,000	1.6 J,B	1.8 J,B	17 B	6.7 B	57 B	2.2 B	2.7 B	0.90 J,B	19 B	5.4 B	130 B
Polychlorinated Biphenyls (PCBs)													
Aroclor-1016	mg/kg	15	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1221	mg/kg	0.63	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1232	mg/kg	0.50	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1242	mg/kg	16	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1248	mg/kg	9.90	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1254	mg/kg	4.40	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	0.039	<0.020	<0.019	<0.018	0.035
Aroclor-1260	mg/kg	30	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019

TABLE 3A : Soil Laboratory Analytical Data Summary
Clean Fill Standards
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Clean Fill Limit ¹	Soil Samples Collected										
			B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3 (16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
Semi-Volatile Organic Compounds (SVOCs)													
1,1'-Biphenyl	mg/kg	790	<0.37	<0.38	<0.44	<0.40	0.11 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.33 J
1,2,4,5-Tetrachlorobenzene	mg/kg	5.1	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
1,2-Diphenylhydrazine(as Azobenzene)	mg/kg	0.15	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
1,4-Dioxane	mg/kg	0.073	<0.76	<0.77	<0.90	<0.80	<0.78	<0.76	<0.78	<0.79	<0.74	<0.73	<1.5
2,2'-oxybis[1-chloropropane]	mg/kg	8.0	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
2,4,5-Trichlorophenol	mg/kg	2,300	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
2,4,6-Trichlorophenol	mg/kg	3.1	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
2,4-Dichlorophenol	mg/kg	1	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
2,4-Dimethylphenol	mg/kg	32	<0.37	<0.38	<0.44	<0.40	0.090 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.12 J
2,4-Dinitrophenol	mg/kg	0.21	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
2,4-Dinitrotoluene	mg/kg	0.050	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
2,6-Dinitrotoluene	mg/kg	1.10	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
2-Chloronaphthalene	mg/kg	6,200	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
2-Chlorophenol	mg/kg	4.40	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
2-Methylnaphthalene	mg/kg	2,900	0.011 J	0.050 J	0.030 J	0.016 J	0.58	0.032 J	0.017 J	0.062 J	0.013 J	0.029 J	1.4
2-Methylphenol	mg/kg	64	<0.37	<0.38	<0.44	<0.40	0.073 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.13 J
2-Nitroaniline	mg/kg	0.038	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
2-Nitrophenol	mg/kg	5.90	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
3,3'-Dichlorobenzidine	mg/kg	8.3	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
3,3'-Dimethylbenzidine	mg/kg	0.4	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
3-Nitroaniline	mg/kg	0.033	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
4,6-Dinitro-2-methylphenol	mg/kg	---	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
4-Bromophenyl phenyl ether	mg/kg	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
4-Chloro-3-methylphenol	mg/kg	37	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
4-Chloroaniline	mg/kg	19.00	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
4-Chlorophenyl phenyl ether	mg/kg	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
4-Nitroaniline	mg/kg	0.031	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
4-Nitrophenol	mg/kg	4.1	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8

TABLE 3A : Soil Laboratory Analytical Data Summary
Clean Fill Standards
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Clean Fill Limit ¹	Soil Samples Collected										
			B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3 (16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
SVOCs Continued													
Acenaphthene	mg/kg	2,700	0.011 J	<0.077	0.035 J	<0.080	0.34	0.024 J	<0.078	0.026 J	<0.074	<0.073	2.0
Acenaphthylene	mg/kg	2,500	<0.076	<0.077	<0.09	<0.08	0.21	<0.076	<0.078	<0.079	<0.074	<0.073	1.2
Acetophenone	mg/kg	200	<0.37	<0.38	<0.44	0.057 J	0.037 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.064 J
Aniline	mg/kg	0.16	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Anthracene	mg/kg	350	0.020 J	<0.077	0.087 J	<0.080	0.87	0.054 J	0.012 J	0.026 J	0.011 J	<0.073	4.9
Atrazine	mg/kg	0.13	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Benzaldehyde	mg/kg	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Benzidine	mg/kg	0.078	<7.6	<7.7	<9.0	<8.0	<7.8	<7.6	<7.8	<7.9	<7.4	<7.3	<15
Benzo[a]anthracene	mg/kg	25	0.046 J	0.011	0.35	<0.080	3.9	0.28	0.055 J	0.025 J	0.084	<0.073	14
Benzo[a]pyrene	mg/kg	2.5	0.039 J	<0.077	0.26	<0.080	6.8	0.43	0.081	0.022 J	0.10	<0.073	12
Benzo[b]fluoranthene	mg/kg	25	0.057 J	<0.077	0.48	<0.080	6.7	0.43	0.097	0.023 J	0.15	<0.073	14
Benzo[g,h,i]perylene	mg/kg	180	0.022 J	<0.077	0.17	<0.080	6.4	0.25	0.070 J	0.017 J	0.095	<0.073	8.5
Benzo[k]fluoranthene	mg/kg	250	<0.076	<0.077	<0.090	<0.080	2.8	0.24	0.049 J	0.022 J	0.065 J	<0.073	5.2
Benzoic acid	mg/kg	2,900	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
Benzyl alcohol	mg/kg	400	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Bis(2-chloroethoxy)methane	mg/kg	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Bis(2-chloroethyl)ether	mg/kg	0.0039	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
Bis(2-ethylhexyl) phthalate	mg/kg	130	<0.76	<0.77	<0.90	0.076 J	0.10 J	<0.76	<0.78	<0.79	0.072 J	0.087 J	0.25 J
Butyl benzyl phthalate	mg/kg	10,000	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Caprolactam	mg/kg	---	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
Carbazole	mg/kg	21	0.014 J	<0.077	0.035 J	<0.080	0.48	0.034 J	0.0095 J	<0.079	0.0070 J	<0.073	2.5
Chrysene	mg/kg	230	0.033 J	<0.077	0.28	<0.080	4.7	0.33	0.064 J	0.030 J	0.11	<0.073	12
Dibenzo(a,h)anthracene	mg/kg	2.50	<0.076	<0.077	0.034 J	<0.080	2.2	0.078	0.014 J	<0.079	0.041 J	<0.073	2.4
Diethyl phthalate	mg/kg	160	<0.37	<0.38	<0.44	0.12 J	<0.38	<0.37	<0.38	<0.39	<0.37	0.045 J	<0.74
Dimethyl phthalate	mg/kg	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Di-n-butyl phthalate	mg/kg	1,500	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Di-n-octyl phthalate	mg/kg	4,400	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Fluoranthene	mg/kg	3,200	0.070 J	0.015 J	0.55	0.010 J	4.7	0.34	0.086	0.084	0.10	0.0087 J	18
Fluorene	mg/kg	3,000	0.013 J	<0.077	0.019 J	<0.080	0.28	0.022 J	0.012 J	0.071 J	<0.074	<0.073	2.2
Hexachlorobenzene	mg/kg	0.96	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
Hexachlorobutadiene	mg/kg	1.20	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
Hexachlorocyclopentadiene	mg/kg	91	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Hexachloroethane	mg/kg	0.560	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Indeno[1,2,3-cd]pyrene	mg/kg	25	0.019 J	<0.077	0.15	<0.080	5.0	0.20	0.057 J	0.013 J	0.091	<0.073	7.3
Isophorone	mg/kg	1.90	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Methylphenol, 3 & 4 (m-cresol)	mg/kg	36	<0.37	<0.38	<0.44	<0.40	0.19 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.27 J
Naphthalene	mg/kg	25	0.021 J	0.075 J	0.046 J	0.15	0.60	0.053 J	0.033 J	0.028 J	0.024 J	0.17	2.1
Nitrobenzene	mg/kg	0.79	<0.76	<0.77	<0.90	<0.80	<0.78	<0.76	<0.78	<0.79	<0.74	<0.73	<1.5
N-Nitrosodi-n-propylamine	mg/kg	0.0013	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
N-Nitrosodiphenylamine	mg/kg	20.00	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
o-Toluidine	mg/kg	0.32	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Pentachlorophenol	mg/kg	5.00	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Phenanthrene	mg/kg	10,000	0.097	0.027 J	0.42	0.013 J	2.9	0.19	0.081	0.18	0.062 J	0.016 J	16
Phenol	mg/kg	66.00	<0.076	<0.077	<0.090	<0.080	0.080	0.034 J	<0.078	<0.079	<0.074	<0.073	0.17
Pyrene	mg/kg	2,200	0.072 J	0.011 J	0.50	0.012 J	4.8	0.31	0.071 J	0.055 J	0.10	0.0079 J	17

TABLE 3A : Soil Laboratory Analytical Data Summary
Clean Fill Standards
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Clean Fill Limit ¹	Soil Samples Collected										
			B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3 (16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
VOCs													
1,1,1-Trichloroethane	mg/kg	7.20	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1,2,2-Tetrachloroethane	mg/kg	0.0093	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	26,000	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1,2-Trichloroethane	mg/kg	0.15	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1-Dichloroethane	mg/kg	0.65	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1-Dichloroethene	mg/kg	0.19	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2,3-Trichloropropane	mg/kg	1.6	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2,4-Trichlorobenzene	mg/kg	27	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2,4-Trimethylbenzene	mg/kg	9	<0.0054	<0.0061	<0.0045	0.014	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dibromo-3-Chloropropane	mg/kg	0.0092	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dibromoethane (EDB)	mg/kg	0.0012	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dichlorobenzene	mg/kg	59	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dichloroethane	mg/kg	0.10	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dichloropropane	mg/kg	0.11	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,3,5-Trimethylbenzene	mg/kg	2.8	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,3-Dichlorobenzene	mg/kg	61	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,4-Dichlorobenzene	mg/kg	10	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
2-Butanone (MEK)	mg/kg	54	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
2-Hexanone	mg/kg	---	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
4-Methyl-2-pentanone (MIBK)	mg/kg	2.9	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056

TABLE 3A : Soil Laboratory Analytical Data Summary
Clean Fill Standards
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Clean Fill Limit ¹	Soil Samples Collected										
			B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3 (16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
VOCs Continued													
Acetone	mg/kg	41	0.0076 J	<0.024	<0.018	0.011 J	<0.024	<0.018	<0.026	<0.021	<0.022	<0.020	<0.023
Acetonitrile	mg/kg	1.9	<0.11	<0.12	<0.089	<0.16	<0.12	<0.092	<0.13	<0.10	<0.11	<0.099	<0.11
Acrolein	mg/kg	0.00062	<0.11	<0.12	<0.089	<0.16	<0.12	<0.092	<0.13	<0.10	<0.11	<0.099	<0.11
Acrylonitrile	mg/kg	0.0087	<0.11	<0.12	<0.089	<0.16	<0.12	<0.092	<0.13	<0.10	<0.11	<0.099	<0.11
Benzene	mg/kg	0.13	<0.0054	<0.0061	<0.0045	0.0015 J	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Bromochloromethane	mg/kg	1.6	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Bromodichloromethane	mg/kg	3.40	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Bromoform	mg/kg	4.4	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Bromomethane	mg/kg	0.54	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Carbon disulfide	mg/kg	160	0.0088	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Carbon tetrachloride	mg/kg	0.26	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Chlorobenzene	mg/kg	6.1	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Chloroethane	mg/kg	5.00	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Chloroform	mg/kg	2.5	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Chloromethane	mg/kg	0.038	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
cis-1,2-Dichloroethene	mg/kg	1.6	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
cis-1,3-Dichloropropene	mg/kg	0.12	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Cyclohexane	mg/kg	---	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Dibromochloromethane	mg/kg	3.20	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Dichlorodifluoromethane	mg/kg	100	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Ethyl methacrylate	mg/kg	14	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Ethylbenzene	mg/kg	46	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Hexachlorobutadiene	mg/kg	1.20	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Hexane	mg/kg	500	<0.0054	0.0055 J	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	1.5 J	<0.0054	<0.0050	<0.0056
Isobutyl alcohol	mg/kg	76	<0.22	<0.24	<0.18	<0.31	<0.24	<0.18	<0.26	<0.21	<0.22	<0.20	<0.23
Isopropylbenzene	mg/kg	780	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methacrylonitrile	mg/kg	0.031	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methyl acetate	mg/kg	690	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methyl methacrylate	mg/kg	26.0	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methyl tert-butyl ether	mg/kg	0.28	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methylcyclohexane	mg/kg	---	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methylene Chloride	mg/kg	0.076	0.0024 J,B	0.0038 J,B	0.00097 J,B	0.0045 J,B	0.0043 J,B	0.0027 J,B	0.0019 J,B	0.0018 J,B	0.0068 B	0.0066 B	0.0028 J,B
Naphthalene	mg/kg	25	0.019 B	0.0015 J,B	0.0011 J,B	0.12 B	<0.0060	<0.0046	<0.0064	0.0039 J,B	<0.0054	<0.0050	0.0098 B
n-Butylbenzene	mg/kg	950	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
N-Propylbenzene	mg/kg	290	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
sec-Butylbenzene	mg/kg	350	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Styrene	mg/kg	24	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
tert-Butylbenzene	mg/kg	270	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Tetrachloroethene	mg/kg	0.43	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	0.0010 J	<0.0054	<0.0050	<0.0056
Toluene	mg/kg	44	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
trans-1,2-Dichloroethene	mg/kg	2.3	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
trans-1,3-Dichloropropene	mg/kg	0.12	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Trichloroethene	mg/kg	0.17	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Trichlorofluoromethane	mg/kg	87	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Vinyl acetate	mg/kg	6.50	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Vinyl chloride	mg/kg	0.03	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Xylenes, Total	mg/kg	990	<0.016	<0.018	<0.013	<0.023	<0.018	<0.014	<0.019	<0.016	<0.016	<0.015	<0.017

TABLE 3A : Soil Laboratory Analytical Data Summary
Clean Fill Standards
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Clean Fill Limit ¹	Soil Samples Collected										
			B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3 (16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
Pesticides													
4,4'-DDD	mg/kg	6.8	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
4,4'-DDE	mg/kg	41	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
4,4'-DDT	mg/kg	53	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	0.00080 J,p	<0.0095
Aldrin	mg/kg	0.10	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
alpha-BHC	mg/kg	0.046	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
beta-BHC	mg/kg	0.22	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
Chlordane (technical)	mg/kg	49	<0.019	<0.019	<0.023	<0.020	<0.20	<0.019	<0.020	<0.020	<0.019	<0.019	<0.095
delta-BHC	mg/kg	11	<0.0019	0.00053 J,p	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	0.00054 J,p	<0.0019	<0.0019	<0.0095
Diallate	mg/kg	0.15	<0.037	<0.038	<0.044	<0.039	<0.39	<0.037	<0.039	<0.039	<0.037	<0.036	<0.18
Dieldrin	mg/kg	0.11	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
Endosulfan I	mg/kg	110	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
Endosulfan II	mg/kg	130	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
Endosulfan sulfate	mg/kg	70	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
Endrin	mg/kg	5.5	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
gamma-BHC (Lindane)	mg/kg	0.072	0.00091 J,p	<0.0019	0.00064 J,p	0.00056 J,p	0.031	0.0042	0.0011 J,p	0.0014 J	0.00061 J	<0.0019	0.10
gamma-Chlordane	mg/kg	---	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
Heptachlor	mg/kg	0.68	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
Heptachlor epoxide	mg/kg	1.1	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095
Methoxychlor	mg/kg	630	<0.0037	<0.0038	<0.0044	<0.0039	0.0092 J,p	0.28	<0.0039	<0.0039	<0.0037	<0.0036	<0.018
Toxaphene	mg/kg	1.20	<0.075	<0.076	<0.089	<0.080	<0.790	<0.076	<0.079	<0.079	<0.074	<0.074	<0.38
Herbicides													
2,4-D	mg/kg	1.8	<0.090	<0.092	<0.11	<0.097	<0.094	<0.090	<0.093	<0.094	<0.089	<0.088	<0.090
2,4,5-T	mg/kg	1.50	<0.023	<0.023	<0.027	<0.024	<0.023	<0.023	<0.023	<0.024	<0.022	<0.022	<0.023
Silvex (2,4,5-TP)	mg/kg	22	<0.023	<0.023	<0.027	<0.024	<0.023	<0.023	<0.023	<0.024	<0.022	<0.022	<0.023
General Chemistry													
Chloride	mg/kg	---	21 B	42 B	72 B	24 B	30 B	74 B	61 B	71 B	51 B	230 B	61 B
Cr (III)	mg/kg	190,000	1.8	5.3	10	4.8	16	5.4	1.1	2.3	5.8	13	26
Cr (VI)	mg/kg	94	<0.45	<0.46	0.14 J	<0.48	<0.47	<0.46	<0.46	<0.47	<0.44	<0.43	1.9
Cyanide, Total	mg/kg	200	0.23 J	20	29	2.2	5.4	4.9	4.2	4.1	6.8	5.9	4.6
Cyanide, Weak Acid Dissociable	mg/kg	---	<0.59	1.5	<0.67	<0.61	0.83	0.24 J	<0.60	0.20 J	0.23 J	0.35 J	0.41 J
Nitrate as N	mg/kg	---	1.8	0.98	4.0	0.73	25	8.3	0.79 J	0.45 J	0.73	<0.49	5.9
Nitrite as N	mg/kg	---	1.1	0.59	1.6	0.46 J	<0.49	0.23 J	<1.2	<0.51	<0.50	<0.49	0.56
Sulfate	mg/kg	---	180 B	5400 B	110 B	2200 B	980 B	380 B	6900 B	3800 B	1900 B	1900 B	170 B

Footnotes:
¹Pennsylvania Department of Environmental Protection, Bureau of Waste Management, "Management of Fill", August 7, 2010. Table FP-1a Clean Fill Concentration Limits for Organics and Table FP-1b Clean Fill Concentration Limits for Metals and Inorganics.

Notes:
mg/kg - milligrams per kilogram
B - Compound was found in the blank and sample
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value
p - The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported
< - Less than the reporting limit, non-detection
Italicized result have reporting limits above the standard set in Footnote 1
Exceeds standards noted in Footnote 1

TABLE 3B : Soil Laboratory Analytical Data Summary
State Wide Health Standards (Act 2)
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Direct Contact 2-15' Values ¹	Soil to GW 100x Values ²	Soil to GW Generic Values ³	Lowest Applicable ACT 2 Standard ⁴	Soil Samples Collected										
						B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3(16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
Metals																
Antimony	mg/kg	190,000	600	27,000	600	<1.1	<1.1	<1.3	<1.2	0.38 J	<1.1	<1.1	<1.2	<1.1	<1.1	0.89 J
Arsenic	mg/kg	190,000	1,000	29,000	1,000	1.0 J	5.1	3.6	2.8	5.1	1.4	0.51 J	1.2	4.0	1.8	4.6
Barium	mg/kg	190,000	190,000	190,000	190,000	320 B	220 B	1,500 B	360 B	260 B	220 B	53 B	280 B	290 B	210 B	140 B
Beryllium	mg/kg	190,000	400	190,000	400	5.3 B	4.3 B	3.1 B	4.7 B	4.9 B	4.7 B	0.98 B	5.5 B	4.6 B	4.5 B	3.5 B
Boron	mg/kg	190,000	190,000	190,000	190,000	110	81	59	87	86	110	20 J	94	78	88	33
Cadmium	mg/kg	190,000	500	38,000	500	<0.55	0.23 J	0.046 J	0.051 J	<0.56	<0.54	<0.56	<0.59	0.10 J	<0.55	0.75
Chromium	mg/kg	20,000	10,000	190,000	10,000	1.8	5.3	10	4.8	16 B	5.4 B	1.1	2.3	5.8	13	28
Cobalt	mg/kg	190,000	3,100	140,000	3,100	<5.5	1.6 J	0.77 J	0.55 J	1.8 J	<5.4	0.17 J	<5.9	1.7 J	0.29 J	3.0 J
Copper	mg/kg	190,000	100,000	190,000	100,000	1.9 J	3.5	8.5	5.1	13	0.83 J	0.60 J	0.81 J	6.1	15	31
Lead	mg/kg	190,000	500	190,000	500	0.25 J	0.80	28	1.2	12	0.61	0.82	<0.36	7.2	0.30 J	140
Manganese	mg/kg	190,000	30,000	190,000	30,000	3,100 B	4,000 B	6,600 B	2,000 B	2,100	2,900	580 B	3,400 B	4,100 B	2,800 B	2,000 B
Mercury	mg/kg	190,000	200	10,000	200	<0.035	<0.038	0.018 J	<0.040	0.14	0.013 J	0.014 J	<0.037	0.019 J	<0.036	1.6
Nickel	mg/kg	190,000	10,000	190,000	10,000	<4.4	2.2 J	4.3 J	1.8 J	9.3	0.68 J	0.49 J	<4.7	3.6 J	4.1J	17
Selenium	mg/kg	190,000	5,000	26,000	5,000	3.0	1.7	<3.3	1.7	3.4	2.4	0.38 J	1.4	1.1	0.94 J	0.81
Silver	mg/kg	190,000	10,000	84,000	10,000	<1.1	<1.1	<3.3	<0.58	<0.56	<1.1	<0.56	<1.2	<1.1	<1.1	<0.56
Thallium	mg/kg	190,000	200	14,000	200	<2.2	<2.2	<6.6	<1.2	<1.1	<2.2	0.27 J	<2.4	<2.1	<2.2	<1.1
Tin	mg/kg	190,000	190,000	190,000	190,000	1.0 J	1.3 J	2.8 J	1.2 J	1.9 J	0.87 J	<11	1.2 J	2.0 J	1.9 J	2.3 J
Vanadium	mg/kg	190,000	72,000	190,000	72,000	2.8 J	13	6.8	5.6 J	7.5	11	1.9 J	5.7 J	10	5.8	11
Zinc	mg/kg	190,000	190,000	190,000	190,000	1.6 J,B	1.8 J,B	17 B	6.7 B	57 B	2.2 B	2.7 B	0.90 J,B	19 B	5.4 B	130 B
Polychlorinated Biphenyls (PCBs)																
Aroclor-1016	mg/kg	10,000	0.72	200	0.72	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1221	mg/kg	10,000	0.13	0.63	0.13	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1232	mg/kg	10,000	0.13	0.5	0.13	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1242	mg/kg	10,000	0.13	16	0.13	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1248	mg/kg	10,000	0.13	62	0.13	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019
Aroclor-1254	mg/kg	10,000	0.13	260	0.13	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	0.039	<0.020	<0.019	<0.018	0.035
Aroclor-1260	mg/kg	190,000	0.13	590	0.13	<0.019	<0.019	<0.022	<0.020	<0.020	<0.019	<0.020	<0.020	<0.019	<0.018	<0.019

TABLE 3B : Soil Laboratory Analytical Data Summary
State Wide Health Standards (Act 2)
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Direct Contact 2-15' Values ¹	Soil to GW 100x Values ²	Soil to GW Generic Values ³	Lowest Applicable ACT 2 Standard ⁴	Soil Samples Collected											
						B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3(16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11	
Semi-Volatile Organic Compounds (SVOCs)																	
1,1'-Biphenyl	mg/kg	190,000	720	3,100	720	<0.37	<0.38	<0.44	<0.40	0.11 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.33 J	
1,2,4,5-Tetrachlorobenzene	mg/kg	190,000	58	270	58	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
1,2-Diphenylhydrazine(as Azobenzene)	mg/kg	190,000	25	44	25	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
1,4-Dioxane	mg/kg	330	32	4.2	4.2	<0.76	<0.77	<0.90	<0.80	<0.78	<0.76	<0.78	<0.79	<0.74	<0.73	<1.5	
2,2'-oxybis[1-chloropropane]	mg/kg	250	3,000	800	250	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15	
2,4,5-Trichlorophenol	mg/kg	190,000	100,000	190,000	100,000	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
2,4,6-Trichlorophenol	mg/kg	190,000	10,000	29,000	10,000	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
2,4-Dichlorophenol	mg/kg	190,000	2,000	1,000	1,000	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15	
2,4-Dimethylphenol	mg/kg	10,000	10,000	10,000	10,000	<0.37	<0.38	<0.44	<0.40	0.090 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.12 J	
2,4-Dinitrophenol	mg/kg	190,000	20,000	2,300	2,300	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8	
2,4-Dinitrotoluene	mg/kg	190,000	840	200	200	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
2,6-Dinitrotoluene	mg/kg	190,000	10,000	3,000	3,000	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
2-Chloronaphthalene	mg/kg	190,000	820	18,000	820	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15	
2-Chlorophenol	mg/kg	10,000	4	4.4	4	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
2-Methylnaphthalene	mg/kg	190,000	41	1,600	41	0.011 J	0.050 J	0.030 J	0.016 J	0.58	0.032 J	0.017 J	0.062 J	0.013 J	0.029 J	1.4	
2-Methylphenol	mg/kg	190,000	51,000	8,500	8,500	<0.37	<0.38	<0.44	<0.40	0.073 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.13 J	
2-Nitroaniline	mg/kg	190,000	31	5.5	5.5	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8	
2-Nitrophenol	mg/kg	190,000	82,000	17,000	17,000	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
3,3'-Dichlorobenzidine	mg/kg	190,000	310	17,000	310	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
3,3'-Dimethylbenzidine	mg/kg	190,000	24	1,300	24	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8	
3-Nitroaniline	mg/kg	190,000	3.1	0.48	0.48	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8	
4,6-Dinitro-2-methylphenol	mg/kg	190,000	1,000	750	750	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8	
4-Bromophenyl phenyl ether	mg/kg	---	---	---	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
4-Chloro-3-methylphenol	mg/kg	190,000	51,000	12,000	12,000	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
4-Chloroaniline	mk/kg	190,000	1.3	1.6	1.3	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
4-Chlorophenyl phenyl ether	mg/kg	---	---	---	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74	
4-Nitroaniline	mg/kg	190,000	13	1.9	1.9	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8	
4-Nitrophenol	mg/kg	190,000	6,000	4,100	4,100	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8	

TABLE 3B : Soil Laboratory Analytical Data Summary
State Wide Health Standards (Act 2)
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Direct Contact 2-15' Values ¹	Soil to GW 100x Values ²	Soil to GW Generic Values ³	Lowest Applicable ACT 2 Standard ⁴	Soil Samples Collected										
						B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3(16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
SVOCs Continued																
Acenaphthene	mg/kg	190,000	380	4,700	380	0.011 J	<0.077	0.035 J	<0.080	0.34	0.024 J	<0.078	0.026 J	<0.074	<0.073	2.0
Acenaphthylene	mg/kg	190,000	1,600	18,000	1,600	<0.076	<0.077	<0.090	<0.080	0.21	<0.076	<0.078	<0.079	<0.074	<0.073	1.2
Acetophenone	mg/kg	10,000	1,000	540	540	<0.37	<0.38	<0.44	<0.40	0.037 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.064 J
Aniline	mg/kg	91	0.88	0.52	0.52	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Anthracene	mg/kg	190,000	6.6	350	6.6	0.020 J	<0.077	0.087 J	<0.080	0.87	0.054 J	0.012 J	0.026 J	0.011 J	<0.073	4.9
Atrazine	mg/kg	190,000	0.3	0.13	0.13	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Benzaldehyde	mg/kg	---	---	---	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Benzidine	mg/kg	190,000	1.1	1,500	1.1	<7.6	<7.7	<9.0	<8.0	<7.8	<7.6	<7.8	<7.9	<7.4	<7.3	<15
Benzo[a]anthracene	mg/kg	190,000	1.1	960	1.1	0.046 J	0.011	0.35	<0.080	3.9	0.28	0.055 J	0.025 J	0.084	<0.073	14
Benzo[a]pyrene	mg/kg	190,000	0.38	860	0.38	0.039 J	<0.077	0.26	<0.080	6.8	0.43	0.081	0.022 J	0.10	<0.073	12
Benzo[b]fluoranthene	mg/kg	190,000	0.12	170	0.12	0.057 J	<0.077	0.48	<0.080	6.7	0.43	0.097	0.023 J	0.15	<0.073	14
Benzo[g,h,i]perylene	mg/kg	190,000	0.026	180	0.026	0.022 J	<0.077	0.17	<0.080	6.4	0.25	0.070 J	0.017 J	0.095	<0.073	8.5
Benzo[k]fluoranthene	mg/kg	190,000	0.055	610	0.055	<0.076	<0.077	<0.090	<0.080	2.8	0.24	0.049 J	0.022 J	0.065 J	<0.073	5.2
Benzoic acid	mg/kg	190,000	41,000	7,800	7,800	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
Benzyl alcohol	mg/kg	10,000	5,100	1,800	1,800	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Bis(2-chloroethoxy)methane	mg/kg	10,000	31	8.2	8.2	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Bis(2-chloroethyl)ether	mg/kg	7.7	7.6	2.3	2.3	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
Bis(2-ethylhexyl) phthalate	mg/kg	10,000	29	6,300	29	<0.76	<0.77	<0.90	0.076 J	0.10 J	<0.76	<0.78	<0.79	0.072 J	0.087 J	0.25 J
Butyl benzyl phthalate	mg/kg	10,000	270	10,000	270	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Caprolactam	mg/kg	---	---	---	---	<1.9	<2.0	<2.3	<2.0	<2.0	<1.9	<2.0	<2.0	<1.9	<1.9	<3.8
Carbazole	mg/kg	190,000	120	760	120	0.014 J	<0.077	0.035 J	<0.080	0.48	0.034 J	0.0095 J	<0.079	0.0070 J	<0.073	2.5
Chrysene	mg/kg	190,000	0.19	230	0.19	0.033 J	<0.077	0.28	<0.080	4.7	0.33	0.064 J	0.030 J	0.11	<0.073	12
Dibenzo[a,h]anthracene	mg/kg	190,000	0.06	270	0.06	<0.076	<0.077	0.034 J	<0.080	2.2	0.078	0.014 J	<0.079	0.041 J	<0.073	2.4
Diethyl phthalate	mg/kg	10,000	10,000	10,000	10,000	<0.37	<0.38	<0.44	0.12 J	<0.38	<0.37	<0.38	<0.39	<0.37	0.045 J	<0.74
Dimethyl phthalate	mg/kg	---	---	---	---	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Di-n-butyl phthalate	mg/kg	10,000	10,000	10,000	10,000	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Di-n-octyl phthalate	mg/kg	10,000	300	10,000	300	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Fluoranthene	mg/kg	190,000	26	3,200	26	0.070 J	0.015 J	0.55	0.010 J	4.7	0.34	0.086	0.084	0.10	0.0087 J	18
Fluorene	mg/kg	190,000	190	3,800	190	0.013 J	<0.077	0.019 J	<0.080	0.28	0.022 J	0.012 J	0.071 J	<0.074	<0.073	2.2
Hexachlorobenzene	mg/kg	190,000	0.6	5.8	0.6	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
Hexachlorobutadiene	mg/kg	10,000	290	3,400	290	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
Hexachlorocyclopentadiene	mg/kg	10,000	180	3,300	180	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Hexachloroethane	mg/kg	640	10	56	10	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Indeno[1,2,3-cd]pyrene	mg/kg	190,000	6.2	190,000	6.2	0.019 J	<0.077	0.15	<0.080	5.0	0.20	0.057 J	0.013 J	0.091	<0.073	7.3
Isophorone	mg/kg	10,000	10,000	1,900	1,900	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Methylphenol, 3 & 4 (m-cresol)	mg/kg	10,000	10,000	10,000	10,000	<0.37	<0.38	<0.44	<0.40	0.19 J	<0.37	<0.38	<0.39	<0.37	<0.36	0.27 J
Naphthalene	mg/kg	190,000	3,000	7,500	3,000	0.021 J	0.075 J	0.046 J	0.15	0.60	0.053 J	0.033 J	0.028 J	0.024 J	0.17	2.1
Nitrobenzene	mg/kg	10,000	10,000	8,700	8,700	<0.76	<0.77	<0.90	<0.80	<0.78	<0.76	<0.78	<0.79	<0.74	<0.73	<1.5
N-Nitrosodi-n-propylamine	mg/kg	10,000	37	5.1	5.1	<0.076	<0.077	<0.090	<0.080	<0.078	<0.076	<0.078	<0.079	<0.074	<0.073	<0.15
N-Nitrosodiphenylamine	mg/kg	190,000	3,500	5,500	3,500	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
o-Toluidine	mg/kg	10,000	1,400	1,600	1,400	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Pentachlorophenol	mg/kg	190,000	100	5,000	100	<0.37	<0.38	<0.44	<0.40	<0.38	<0.37	<0.38	<0.39	<0.37	<0.36	<0.74
Phenanthrene	mg/kg	190,000	110	10,000	110	0.097	0.027 J	0.42	0.013 J	2.9	0.19	0.081	0.18	0.062 J	0.016 J	16
Phenol	mg/kg	190,000	20,000	3,300	3,300	<0.076	<0.077	<0.090	<0.080	0.080	0.034 J	<0.078	<0.079	<0.074	<0.073	0.17
Pyrene	mg/kg	190,000	13	2,200	13	0.072 J	0.011 J	0.50	0.012 J	4.8	0.31	0.071 J	0.055 J	0.10	0.0079 J	17

TABLE 3B : Soil Laboratory Analytical Data Summary
State Wide Health Standards (Act 2)
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Direct Contact 2-15' Values ¹	Soil to GW 100x Values ²	Soil to GW Generic Values ³	Lowest Applicable ACT 2 Standard ⁴	Soil Samples Collected										
						B-1(6')11/3/11	B-1(15')11/3/11	B-2(6')11/2/11	B-2(16')11/2/11	B-3(6')11/10/11	B-3(16')11/10/11	B-4(6')11/7/11	B-4(16')11/7/11	B-5(6')11/4/11	B-5(16')11/4/11	B-6(6')11/8/11
VOCs																
1,1,1-Trichloroethane	mg/kg	10,000	200	72	72	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1,2,2-Tetrachloroethane	mg/kg	44	43	13	13	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	10,000	10,000	10,000	10,000	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1,2-Trichloroethane	mg/kg	160	5	1.5	1.5	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1-Dichloroethane	mg/kg	1,600	160	39	39	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,1-Dichloroethene	mg/kg	10,000	7	1.9	1.9	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2,3-Trichloropropane	mg/kg	460	400	320	320	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2,4-Trichlorobenzene	mg/kg	10,000	4,400	10,000	4,400	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2,4-Trimethylbenzene	mg/kg	640	620	3,500	620	<0.0054	<0.0061	<0.0045	0.014	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dibromo-3-Chloropropane	mg/kg	0.43	2	0.92	0.43	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dibromoethane (EDB)	mg/kg	4.3	0.5	0.12	0.12	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dichlorobenzene	mg/kg	10,000	6,000	5,900	5,900	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dichloroethane	mg/kg	98	5	1	1	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,2-Dichloropropane	mg/kg	260	5	1.1	1.1	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,3,5-Trimethylbenzene	mg/kg	550	5.3	9.3	5.3	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,3-Dichlorobenzene	mg/kg	10,000	6,000	6,100	6,000	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
1,4-Dichlorobenzene	mg/kg	230	750	1,000	230	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
2-Butanone (MEK)	mg/kg	10,000	10,000	7,600	7,600	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
2-Hexanone	mg/kg	460	4.4	1.1	1.1	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
4-Methyl-2-pentanone (MIBK)	mg/kg	10,000	10,000	10,000	10,000	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056

TABLE 3B : Soil Laboratory Analytical Data Summary
State Wide Health Standards (Act 2)
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Direct Contact 2-15' Values ¹	Soil to GW 100x Values ²	Soil to GW Generic Values ³	Lowest Applicable ACT 2 Standard ⁴	Soil Samples Collected										
						B-1(6'')11/3/11	B-1(15'')11/3/11	B-2(6'')11/2/11	B-2(16'')11/2/11	B-3(6'')11/10/11	B-3(16'')11/10/11	B-4(6'')11/7/11	B-4(16'')11/7/11	B-5(6'')11/4/11	B-5(16'')11/4/11	B-6(6'')11/8/11
VOCs Continued																
Acetone	mg/kg	10,000	10,000	10,000	10,000	0.0076 J	<0.024	<0.018	0.011 J	<0.024	<0.018	<0.026	<0.021	<0.022	<0.020	<0.023
Acetonitrile	mg/kg	5,500	530	60	60	<0.11	<0.12	<0.089	<0.16	<0.12	<0.092	<0.13	<0.10	<0.11	<0.099	<0.11
Acrolein	mg/kg	1.8	0.18	0.02	0.02	<0.11	<0.12	<0.089	<0.16	<0.12	<0.092	<0.13	<0.10	<0.11	<0.099	<0.11
Acrylonitrile	mg/kg	38	37	5.1	5.1	<0.11	<0.12	<0.089	<0.16	<0.12	<0.092	<0.13	<0.10	<0.11	<0.099	<0.11
Benzene	mg/kg	330	50	13	13	<0.0054	<0.0061	<0.0045	0.0015 J	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Bromochloromethane	mg/kg	10,000	9	1.6	1.6	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Bromodichloromethane	mg/kg	69	8	2.7	2.7	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Bromoform	mg/kg	2,300	800	350	350	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Bromomethane	mg/kg	460	100	54	54	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Carbon disulfide	mg/kg	10,000	620	530	530	0.0088	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Carbon tetrachloride	mg/kg	170	5	2.6	2.6	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Chlorobenzene	mg/kg	4,600	1,000	610	610	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Chloroethane	mg/kg	10,000	9,000	1,900	1,900	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Chloroform	mg/kg	110	80	20	20	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Chloromethane	mg/kg	1,400	300	38	38	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
cis-1,2-Dichloroethene	mg/kg	10,000	70	16	16	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
cis-1,3-Dichloropropene	mg/kg	640	260	46	46	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Cyclohexane	mg/kg	10,000	5,300	6,900	5,300	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Dibromochloromethane	mg/kg	95	800	250	95	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Dichlorodifluoromethane	mg/kg	10,000	10,000	10,000	10,000	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Ethyl methacrylate	mg/kg	10,000	920	150	150	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Ethylbenzene	mg/kg	10,000	7,000	4,600	4,600	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Hexachlorobutadiene	mg/kg	10,000	290	3,400	290	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Hexane	mg/kg	10,000	610	5,600	610	<0.0054	0.0055 J	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	1.5 J	<0.0054	<0.0050	<0.0056
Isobutyl alcohol	mg/kg	10,000	10,000	10,000	10,000	<0.22	<0.24	<0.18	<0.31	<0.24	<0.18	<0.26	<0.21	<0.22	<0.20	<0.23
Isopropylbenzene	mg/kg	10,000	5,000	10,000	5,000	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methacrylonitrile	mg/kg	64	0.62	0.1	0.10	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methyl acetate	mg/kg	10,000	10,000	1,900	1,900	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methyl methacrylate	mg/kg	10,000	10,000	8,400	8,400	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methyl tert-butyl ether	mg/kg	3,700	20	2.8	2.8	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methylcyclohexane	mg/kg	---	---	---	---	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Methylene Chloride	mg/kg	5,400	50	7.6	7.6	0.0024 J,B	0.0038 J,B	0.00097 J,B	0.0045 J,B	0.0043 J,B	0.0027 J,B	0.0019 J,B	0.0018 J,B	0.0068 B	0.0066 B	0.0028 J,B
Naphthalene	mg/kg	190,000	3,000	7,500	3,000	0.019 B	0.0015 J,B	0.0011 J,B	0.12 B	<0.0060	<0.0046	<0.0064	0.0039 J,B	<0.0054	<0.0050	0.0098 B
n-Butylbenzene	mg/kg	10,000	410	2,600	410	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
N-Propylbenzene	mg/kg	10,000	410	780	410	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
sec-Butylbenzene	mg/kg	10,000	410	960	410	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Styrene	mg/kg	10,000	1,000	2,400	1,000	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
tert-Butylbenzene	mg/kg	10,000	410	740	410	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Tetrachloroethene	mg/kg	4,400	5	4.3	4.3	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	0.0010 J	<0.0054	<0.0050	<0.0056
Toluene	mg/kg	10,000	10,000	4,400	4,400	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
trans-1,2-Dichloroethene	mg/kg	5,500	100	23	23	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
trans-1,3-Dichloropropene	mg/kg	640	260	46	46	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Trichloroethene	mg/kg	1,500	5	1.7	1.7	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Trichlorofluoromethane	mg/kg	10,000	10,000	8,700	8,700	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Vinyl acetate	mg/kg	10,000	180	21	21	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Vinyl chloride	mg/kg	580	2	0.27	0.27	<0.0054	<0.0061	<0.0045	<0.0078	<0.0060	<0.0046	<0.0064	<0.0052	<0.0054	<0.0050	<0.0056
Xylenes, Total	mg/kg	9,100	10,000	10,000	9,100	<0.016	<0.018	<0.013	<0.023	<0.018	<0.014	<0.019	<0.016	<0.016	<0.015	<0.017

TABLE 3B : Soil Laboratory Analytical Data Summary
State Wide Health Standards (Act 2)
United States Steel Corporation
Clairton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Direct Contact 2-15' Values ¹	Soil to GW 100x Values ²	Soil to GW Generic Values ³	Lowest Applicable ACT 2 Standard ⁴	Soil Samples Collected											
						B-1(6'')11/3/11	B-1(15'')11/3/11	B-2(6'')11/2/11	B-2(16'')11/2/11	B-3(6'')11/10/11	B-3(16'')11/10/11	B-4(6'')11/7/11	B-4(16'')11/7/11	B-5(6'')11/4/11	B-5(16'')11/4/11	B-6(6'')11/8/11	
Pesticides																	
4,4'-DDD	mg/kg	190,000	16	1,800	16	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
4,4'-DDE	mg/kg	190,000	4	870	4	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
4,4'-DDT	mg/kg	190,000	0.55	330	0.55	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	0.00080 J,p	<0.0095	
Aldrin	mg/kg	190,000	2	240	2	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
alpha-BHC	mg/kg	190,000	41	190	41	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
beta-BHC	mg/kg	190,000	10	59	10	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
Chlordane (technical)	mg/kg	190,000	5.6	1,400	5.6	<0.019	<0.019	<0.023	<0.020	<0.20	<0.019	<0.020	<0.020	<0.019	<0.019	<0.095	
delta-BHC	mg/kg	10,000	5,300	6,900	5,300	<0.0019	0.00053 J,p	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	0.00054 J,p	<0.0019	<0.0019	<0.0095	
Diallate	mg/kg	10,000	4,000	2,300	2,300	<0.037	<0.038	<0.044	<0.039	<0.39	<0.037	<0.039	<0.039	<0.037	<0.036	<0.18	
Dieldrin	mg/kg	10,000	16	440	16	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
Endosulfan I	mg/kg	190,000	50	260	50	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
Endosulfan II	mg/kg	190,000	45	260	45	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
Endosulfan sulfate	mg/kg	190,000	12	70	12	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
Endrin	mg/kg	190,000	0.2	5.5	0.2	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
gamma-BHC (Lindane)	mg/kg	190,000	20	72	20	0.00091 J,p	<0.0019	0.00064 J,p	0.00056 J,p	0.031	0.0042	0.0011 J,p	0.0014 J	0.00061 J	<0.0019	0.10	
gamma-Chlordane	mg/kg	---	---	---	---	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
Heptachlor	mg/kg	190,000	18	310	18	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
Heptachlor epoxide	mg/kg	190,000	20	1,100	20	<0.0019	<0.0019	<0.0023	<0.0020	<0.020	<0.0019	<0.0020	<0.0020	<0.0019	<0.0019	<0.0095	
Methoxychlor	mg/kg	190,000	4.5	710	4.5	<0.0037	<0.0038	<0.0044	<0.0039	0.0092 J,p	0.28	<0.0039	<0.0039	<0.0037	<0.0036	<0.018	
Toxaphene	mg/kg	190,000	0.3	1.2	0.3	<0.075	<0.076	<0.089	<0.080	<0.79	<0.076	<0.079	<0.079	<0.074	<0.074	<0.38	
Herbicides																	
2,4-D	mg/kg	190,000	7,000	1,800	1,800	<0.090	<0.092	<0.11	<0.097	<0.094	<0.090	<0.093	<0.094	<0.089	<0.088	<0.090	
2,4,5-T	mg/kg	190,000	7,000	1,500	1,500	<0.023	<0.023	<0.027	<0.024	<0.023	<0.023	<0.023	<0.024	<0.022	<0.022	<0.023	
Silvex (2,4,5-TP)	mg/kg	190,000	5	22	5	<0.023	<0.023	<0.027	<0.024	<0.023	<0.023	<0.023	<0.024	<0.022	<0.022	<0.023	
General Chemistry																	
Chloride	mg/kg	---	---	---	---	21 B	42 B	72 B	24 B	30 B	74 B	61 B	71 B	51 B	230 B	61 B	
Cr (III)	mg/kg	190,000	10,000	190,000	10,000	1.8	5.3	10	4.8	16	5.4	1.1	2.3	5.8	13	26	
Cr (VI)	mg/kg	20,000	10,000	190,000	10,000	<0.45	<0.46	0.14 J	<0.48	<0.47	<0.46	<0.46	<0.47	<0.44	<0.43	1.9	
Cyanide, Total	mg/kg	190,000	20,000	190,000	20,000	0.23 J	20	29	2.2	5.4	4.9	4.2	4.1	6.8	5.9	4.6	
Cyanide, Weak Acid Dissociable	mg/kg	---	---	---	---	<0.59	1.5	<0.67	<0.61	0.83	0.24 J	<0.60	0.20 J	0.23 J	0.35 J	0.41 J	
Nitrate as N	mg/kg	---	---	---	---	1.8	0.98	4.0	0.73	25	8.3	0.79 J	0.45 J	0.73	<0.49	5.9	
Nitrite as N	mg/kg	---	---	---	---	1.1	0.59	1.6	0.46 J	<0.49	0.23 J	<1.2	<0.51	<0.50	<0.49	0.56	
Sulfate	mg/kg	---	---	---	---	180 B	5400 B	110 B	2200 B	980 B	380 B	6900 B	3800 B	1900 B	1900 B	170 B	

Footnotes:

¹Pennsylvania Department of Environmental Protection, Land Recycling Program (Act 2), Statewide Health Standards (published January 8, 2011), Medium-Specific Concentrations for Organic and Inorganic Substances in Soil-Direct Contact Values- Non-Residential, Subsurface Soil 2-15 feet
²Pennsylvania Department of Environmental Protection, Land Recycling Program (Act 2), Statewide Health Standards (published January 8, 2011), Medium-Specific Concentrations for Organic and Inorganic Substances in Soil-Soil to Groundwater Numeric Values-Nonuse Aquifers, Non-Residential, 100x GW MSC
³Pennsylvania Department of Environmental Protection, Land Recycling Program (Act 2), Statewide Health Standards (published January 8, 2011), Medium-Specific Concentrations for Organic and Inorganic Substances in Soil-Soil to Groundwater Numeric Values- Nonuse Aquifers, Non-Residential, Generic Value
⁴Lowest Applicable Act 2 Standard comparing footnotes 1, 2 and 3 standards

Notes:

mg/kg - milligrams per kilogram
B - Compound was found in the blank and sample
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value
p - The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported
< - Less than the reporting limit, non-detection
Italicized result have reporting limits above the standard set in Footnote 4
Exceeds standards noted in Footnote 4

The numbers in the table (soil-to-groundwater) include both the value that is 100 times the appropriate groundwater MSC and the number resulting from the application of the soil-to-groundwater equation in the Act 2 regulations (the “generic value”). The Act 2 regulations allow the choice of which soil-to-groundwater numeric value to use, i.e., the highest of the 100x GW MSC value or the generic value. Therefore, the “Lowest Applicable Act 2 Standard” is a conservative data evaluation criterion when comparing those constituents that were not detected at the reporting limit, and the reporting limit is greater than the Lowest Applicable Act 2 Standard (i.e., italicized values).

TABLE 4 : Groundwater Laboratory Analytical Data Summary

United States Steel Corporation
Clariton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Water Samples Collected			
		B-1W 11/9/11	B-2W 11/9/11	B-4W 11/8/11	B-5W 11/8/11
Metals					
Aluminum	ug/l	26 J	140 J	720	500
Antimony	ug/l	<10	2.3 J	<10	1.8 J
Arsenic	ug/l	7.1 J	<10	4.7 J	6.1 J
Barium	ug/l	100 J	51 J	100 J	91 J
Beryllium	ug/l	0.40 J	0.41 J	<4.0	<4.0
Boron	ug/l	630	290	58 J	41 J
Cadmium	ug/l	<5.0	<5.0	<5.0	<5.0
Calcium	ug/l	200,000	95,000	240,000	240,000
Chromium	ug/l	1.7 J	<5.0	0.83J	<5.0
Cobalt	ug/l	<50	<50	<50	<50
Copper	ug/l	<25	<25	<25	<25
Iron	ug/l	220	41 J	180	280
Lead	ug/l	<3.0	<3.0	<3.0	<3.0
Magnesium	ug/l	2,100 J	650 J	<5,000	<5000
Manganese	ug/l	28	4.0 J	<15	<15
Mercury	ug/l	<0.20	<0.20	0.083 J	0.12 J
Nickel	ug/l	<40	<40	<40	<40
Potassium	ug/l	16,000	8,000	34,000	36,000
Selenium	ug/l	28	27	7.4	14
Silver	ug/l	<5.0	<5.0	<5.0	<5.0
Sodium	ug/l	260,000	94,000	170,000	200,000
Thallium	ug/l	<10	<10	2.4 J	2.5 J
Vanadium	ug/l	3.1 J	2.0 J	5.2 J	5.0 J
Zinc	ug/l	5.4 J,B	4.4 J,B	5.6 J,B	5.8 J,B
Semi-Volatile Organic Compounds (SVOCs)					
1,1'-Biphenyl	ug/l	1.8 J	2.1 J	<38	1.5 J
2,2'-oxybis[1-chloropropane]	ug/l	<0.97	<0.77	<7.7	<4.9
2,4,5-Trichlorophenol	ug/l	<4.9	<3.8	<38	<25
2,4,6-Trichlorophenol	ug/l	<4.9	<3.8	<38	<25
2,4-Dichlorophenol	ug/l	<0.97	<0.77	<7.7	<4.9
2,4-Dimethylphenol	ug/l	<4.9	<3.8	6.8 J	3.7 J
2,4-Dinitrophenol	ug/l	<24	<19	<190	<120
2,4-Dinitrotoluene	ug/l	<4.9	<3.8	<38	<25
2,6-Dinitrotoluene	ug/l	<4.9	<3.8	<38	<25
2-Chloronaphthalene	ug/l	<0.97	<0.77	<7.7	<4.9
2-Chlorophenol	ug/l	<4.9	<3.8	<38	<25
2-Methylnaphthalene	ug/l	5.2	9.5	19	15
2-Methylphenol	ug/l	<4.9	<3.8	9.2 J	6.5 J
2-Nitroaniline	ug/l	<24	<19	<190	<120
2-Nitrophenol	ug/l	<4.9	<3.8	<38	<25
3,3'-Dichlorobenzidine	ug/l	<4.9	<3.8	<38	<25
3-Nitroaniline	ug/l	<24	<19	<190	<120
4,6-Dinitro-2-methylphenol	ug/l	<24	<19	<190	<120
4-Bromophenyl phenyl ether	ug/l	<4.9	<3.8	<38	<25
4-Chloro-3-methylphenol	ug/l	<4.9	<3.8	<38	<25
4-Chloroaniline	ug/l	<4.9	<3.8	<38	<25
4-Chlorophenyl phenyl ether	ug/l	<4.9	<3.8	<38	<25
4-Nitroaniline	ug/l	<24	<19	<190	<120
4-Nitrophenol	ug/l	<24	<19	<190	<120

TABLE 4 : Groundwater Laboratory Analytical Data Summary
United States Steel Corporation
Clariton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Water Samples Collected			
		B-1W 11/9/11	B-2W 11/9/11	B-4W 11/8/11	B-5W 11/8/11
SVOCs Continued					
Acenaphthene	ug/l	3.4	2.4	<7.7	1.1 J
Acenaphthylene	ug/l	4.3	3.5	3.7 J	2.9 J
Acetophenone	ug/l	<4.9	<3.8	<38	<25
Anthracene	ug/l	<0.97	<0.77	<7.7	<4.9
Atrazine	ug/l	<4.9	<3.8	<38	<25
Benzaldehyde	ug/l	<4.9	<3.8	<38	<25
Benzo[a]anthracene	ug/l	<0.97	<0.77	<7.7	<4.9
Benzo[a]pyrene	ug/l	<0.97	<0.77	<7.7	<4.9
Benzo[b]fluoranthene	ug/l	<0.97	<0.77	<7.7	<4.9
Benzo[g,h,i]perylene	ug/l	<0.97	<0.77	<7.7	<4.9
Benzo[k]fluoranthene	ug/l	<0.97	<0.77	<7.7	<4.9
Bis(2-chloroethoxy)methane	ug/l	<4.9	<3.8	<38	<25
Bis(2-chloroethyl)ether	ug/l	<0.97	<0.77	<7.7	<4.9
Bis(2-ethylhexyl) phthalate	ug/l	<9.7	<7.7	<77	<49
Butyl benzyl phthalate	ug/l	<4.9	<3.8	<38	<25
Caprolactam	ug/l	<24	<19	<190	<120
Carbazole	ug/l	0.91 J	0.46 J	6.8 J	4.1 J
Chrysene	ug/l	<0.97	<0.77	<7.7	<4.9
Dibenz(a,h)anthracene	ug/l	<0.97	<0.77	<7.7	<4.9
Dibenzofuran	ug/l	4.7 J	4.7	<38	2.2 J
Diethyl phthalate	ug/l	<4.9	<3.8	<38	<25
Dimethyl phthalate	ug/l	<4.9	<3.8	<38	<25
Di-n-butyl phthalate	ug/l	<4.9	<3.8	<38	<25
Di-n-octyl phthalate	ug/l	<4.9	<3.8	<38	<25
Fluoranthene	ug/l	0.79 J	0.87	<7.7	<4.9
Fluorene	ug/l	3.5	4.0	1.1 J	0.88 J
Hexachlorobenzene	ug/l	<0.97	<0.77	<7.7	<4.9
Hexachlorobutadiene	ug/l	<0.97	<0.77	<7.7	<4.9
Hexachlorocyclopentadiene	ug/l	<4.9	<3.8	<38	<25
Hexachloroethane	ug/l	<4.9	<3.8	<38	<25
Indeno[1,2,3-cd]pyrene	ug/l	<0.97	<0.77	<7.7	<4.9
Isophorone	ug/l	<4.9	<3.8	<38	<25
Methylphenol, 3 & 4	ug/l	<4.9	0.41 J	7.2J	8.8 J
Naphthalene	ug/l	100	58	410	250
Nitrobenzene	ug/l	<9.7	<7.7	<77	<49
N-Nitrosodi-n-propylamine	ug/l	<0.97	<0.77	<7.7	<4.9
N-Nitrosodiphenylamine	ug/l	<4.9	<3.8	<38	<25
Pentachlorophenol	ug/l	<4.9	<3.8	<38	<25
Phenanthrene	ug/l	3.8	6.0	3.4 J	2.7 J
Phenol	ug/l	0.48 J	1.3	7.1 J	8.6
Pyrene	ug/l	0.61 J	0.61 J	<7.7	<4.9

TABLE 4 : Groundwater Laboratory Analytical Data Summary
United States Steel Corporation
Clariton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Water Samples Collected			
		B-1W 11/9/11	B-2W 11/9/11	B-4W 11/8/11	B-5W 11/8/11
VOCs					
1,1,1-Trichloroethane	ug/l	<2.0	<1.0	<20	<13
1,1,2,2-Tetrachloroethane	ug/l	<2.0	<1.0	<20	<13
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	<2.0	<1.0	<20	<13
1,1,2-Trichloroethane	ug/l	<2.0	<1.0	<20	<13
1,1-Dichloroethane	ug/l	<2.0	<1.0	<20	<13
1,1-Dichloroethene	ug/l	<2.0	<1.0	<20	<13
1,2,4-Trichlorobenzene	ug/l	<2.0	<1.0	<20	<13
1,2-Dibromo-3-Chloropropane	ug/l	<2.0	<1.0	<20	<13
1,2-Dibromoethane (EDB)	ug/l	<2.0	<1.0	<20	<13
1,2-Dichlorobenzene	ug/l	<2.0	<1.0	<20	<13
1,2-Dichloroethane	ug/l	<2.0	<1.0	<20	<13
1,2-Dichloropropane	ug/l	<2.0	<1.0	<20	<13
1,3-Dichlorobenzene	ug/l	<2.0	<1.0	<20	<13
1,4-Dichlorobenzene	ug/l	<2.0	<1.0	<20	<13
2-Butanone (MEK)	ug/l	<10	<5.0	<100	<63
2-Hexanone	ug/l	<10	<5.0	<100	<63
4-Methyl-2-pentanone (MIBK)	ug/l	<10	<5.0	<100	<63
VOCs Continued					
Acetone	ug/l	<10	3.3 J	<100	<63
Benzene	ug/l	39	1.4	320	210
Bromodichloromethane	ug/l	<2.0	<1.0	<20	<13
Bromoform	ug/l	<2.0	<1.0	<20	<13
Bromomethane	ug/l	<2.0	<1.0	<20	<13
Carbon disulfide	ug/l	<2.0	<1.0	<20	<13
Carbon tetrachloride	ug/l	<2.0	<1.0	<20	<13
Chlorobenzene	ug/l	<2.0	<1.0	<20	<13
Chloroethane	ug/l	<2.0	<1.0	<20	<13
Chloroform	ug/l	<2.0	<1.0	<20	<13
Chloromethane	ug/l	<2.0	<1.0	<20	<13
cis-1,2-Dichloroethene	ug/l	<2.0	<1.0	<20	<13
cis-1,3-Dichloropropene	ug/l	<2.0	<1.0	<20	<13
Cyclohexane	ug/l	<2.0	<1.0	<20	<13
Dibromochloromethane	ug/l	<2.0	<1.0	<20	<13
Dichlorodifluoromethane	ug/l	<2.0	<1.0	<20	<13
Ethylbenzene	ug/l	2.5	0.42 J	31	28
Isopropylbenzene	ug/l	<2.0	<1.0	<20	<13
Methyl acetate	ug/l	<2.0	<1.0	<20	<13
Methyl tert-butyl ether	ug/l	<2.0	<1.0	<20	<13
Methylcyclohexane	ug/l	<2.0	<1.0	<20	<13
Methylene Chloride	ug/l	<2.0	<1.0	7.8 J	4.2 J
Styrene	ug/l	<2.0	0.57 J	17 J	5.6 J
Tetrachloroethene	ug/l	<2.0	<1.0	<20	<13
Toluene	ug/l	11	1.1	47	21
trans-1,2-Dichloroethene	ug/l	<2.0	<1.0	<20	<13
trans-1,3-Dichloropropene	ug/l	<2.0	<1.0	<20	<13
Trichloroethene	ug/l	<2.0	<1.0	<20	<13
Trichlorofluoromethane	ug/l	<2.0	<1.0	<20	<13
Vinyl chloride	ug/l	<2.0	<1.0	<20	<13
Xylenes, Total	ug/l	18	6.8	61	43

TABLE 4 : Groundwater Laboratory Analytical Data Summary
United States Steel Corporation
Clariton Works, Clairton, Pennsylvania
Proposed 5A and 7A Quench Towers
GAI Project No. C071418.13

Compound	Units	Water Samples Collected			
		B-1W 11/9/11	B-2W 11/9/11	B-4W 11/8/11	B-5W 11/8/11
General Chemistry					
Ammonia, distilled	ug/l	2.1	1.0	11 B	15 B
Chemical Oxygen Demand	ug/l	46	13	35	43
Cyanide, Total	ug/l	330	15	160	54
HEM (Oil and Grease)	ug/l	2.3 J	2.5 J	1.9 J	3.2 J
pH	ug/l	9.74 HF	10.8 HF	11.8 HF	11.8 HF
Total Suspended Solids	ug/l	<4.0	<4.0	4.8	<4.0

Notes:

Metals samples were field filtered. Data presented is provided as dissolved.

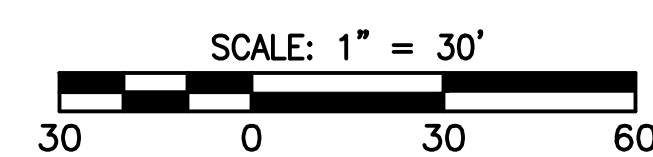
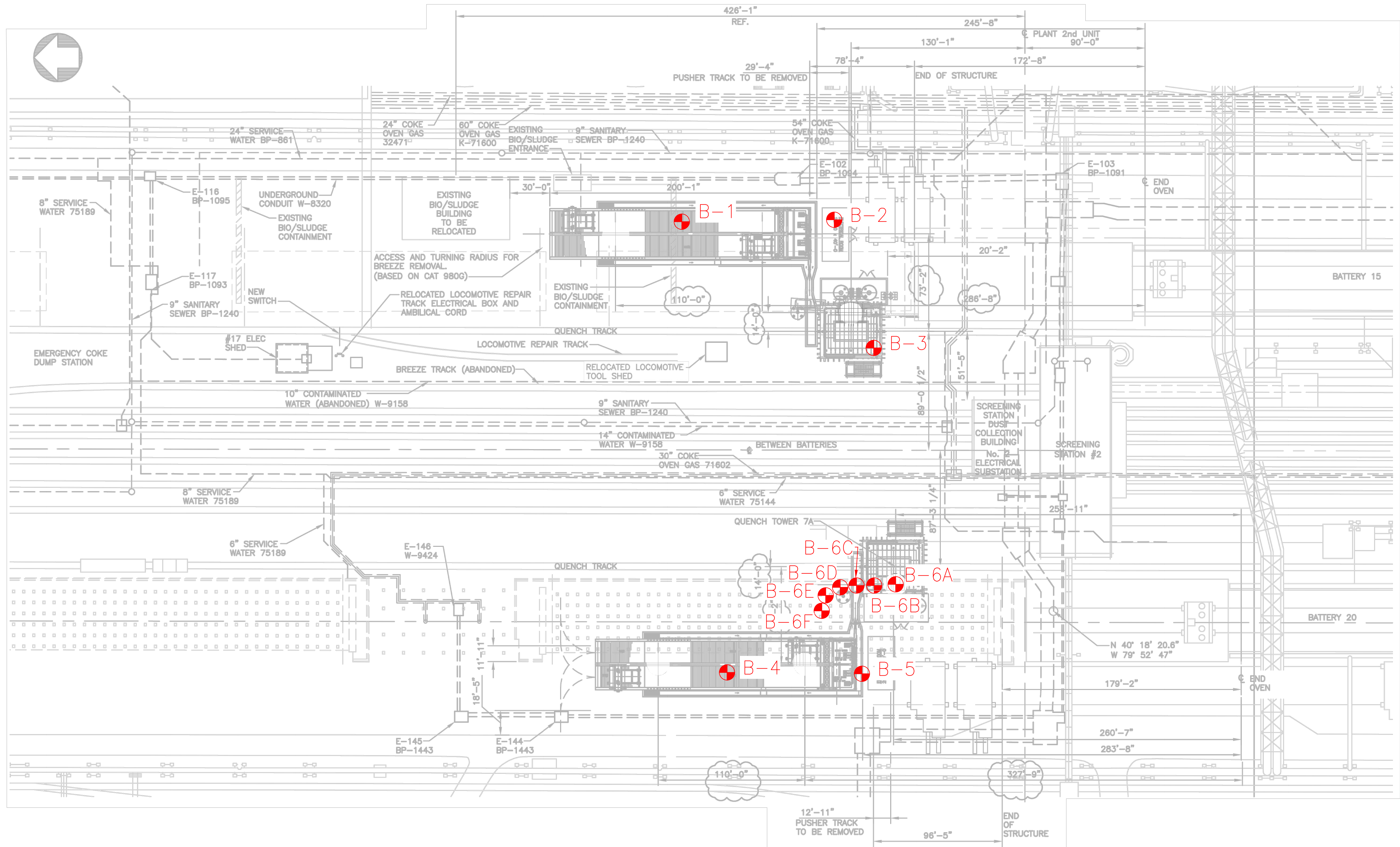
ug/l - micrograms per liter

B - Compound was found in the blank and sample.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HF - Field parameter with a holding time of 15 minutes.

FIGURE



REFERENCE DRAWING 337806-M-007 REV. C DATED 10/27/2011 WAS PROVIDED BY HATCH.

This drawing was produced with computer aided drafting technology and is supported by electronic drawing files. Do not revise this drawing via manual drafting methods.

FIGURE 1
BORING LOCATION PLAN
5A-7A QUENCH TOWER SITES

UNITED STATES STEEL — CLAIRTON WORKS
CLAIRTON, PENNSYLVANIA



DRAWN JCN	APPROVED FBN
CHECKED RDS	DATE 11/21/11
DRAWING NUMBER	REV
C071418.00.00.000.E WS1	

NO.	DATE	DWN	CHKD	APPVD	DESCRIPTION

REVISIONS

PITTSBURGH OFFICE • 385 EAST WATERFRONT DRIVE, HOMESTEAD, PA 15120-5005

GAU DRAWING FILE NO. C071418.00.00.000.E WS1.DWG

APPENDIX A
LOGS OF BORINGS

ENGINEERS FIELD BORING LOG

BORING NO.	B-1
SHEET	1 OF 3
DATE: START	11/3/11
O.G. END	11/3/11
ELEV.	760.0

PROJECT NAME **USS-Clairton** PROJECT NUMBER **C071418.13**

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR **Raymond D. Glenn**

DRILLERS NAME/COMPANY **Earl Dye/Penn Drill**

EQUIPMENT USED **CME 85 Truck Mount**

DRILLING METHODS **4-1/4 HSA**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: **16.2'** TIME: **0** DATE: _____

CHECKED BY: **RDG** ; DATE: **11/16/2011** DEPTH: **16.2'** TIME: **12** DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
0.6								Concrete	
2.1	S-1	50 20 14	1.4'	-		GP	-	Slag and sand, moist, very dense, green-brown	Fill 0.0PPM
5.0									
5.9	S-2	50/.4 50/.3 50/.2	1.2'	-		GP	-	Slag, moist to dry, very dense, gray	*Continue to pound spoon for environmental sample at 6.0' 0.0 PPM
10.0									
11.5	S-3	12 10 2	0.5'	-		GP	-	- Moist, dense, black-white	0.0PPM
15.0									
15.4	S-4	50/.4	0.4'	-		GP	-		15' Environmental sample 0.0PPM
20.0									

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-1
SHEET	2 OF 3
DATE: START	11/3/11
O.G. END	11/3/11
ELEV.	760.0

PROJECT NAME **USS-Clairton** PROJECT NUMBER **C071418.13**

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR **Raymond D. Glenn**

DRILLERS NAME/COMPANY **Earl Dye/Penn Drill**

EQUIPMENT USED **CME 85 Truck Mount**

DRILLING METHODS **4-1/4 HSA**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: **16.2'** TIME: **0** DATE: _____

CHECKED BY: **RDG** ; DATE: **11/16/2011** DEPTH: **16.2'** TIME: **12** DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (FL)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
20.5	S-5	100/5	0.5'	-		GP	-	Slag, saturated, very dense, gray	0.0PPM
25.0									
26.5	S-6	24 8 5	0.5'	-		GP	-	- Saturated medium dense, gray	0.0PPM
30.0									
31.5	S-7	2 2 3	1.1'	-		SW	-	Fine to medium Sand, saturated, loose, dark gray	Alluvium 0.0PPM
35.0									
36.5	S-8	3 4 6	1.0'	-		ML	-	-with some slag	0.0PPM 3.0 TSF
40.0								Silt, moist, stiff, medium brown	

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-1
SHEET	3 OF 3
DATE: START	11/3/11
O.G. END	11/3/11
ELEV.	760.0

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR Raymond D. Glenn

DRILLERS NAME/COMPANY Earl Dye/Penn Drill

EQUIPMENT USED CME 85 Truck Mount

DRILLING METHODS 4-1/4 HSA

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.2' TIME: 0 DATE: _____

CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.2' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
41.5	S-9	5 10 13	1.4'	-		ML	-	- very stiff, medium brown, trace gray, mottling	0.0PPM 2.75 TSF
45.0									
46.5	S-10	5 10 14	1.5'	-		ML	-		0.0PPM 1.5 TSF
48.5									
50.0	S-11	WOH WOH 2	1.5'	-		ML	-	Silt, very moist, very soft, dark gray	0.0PPM 0.5 TSF
								Bottom of boring @ 50.0'	
								Monitoring Well (B-1) Cuttings 0 - 6 Bentonite 6 - 8 Sand 8 - 30 Screen 10 - 30 (2" PVC 0.010 Slot) Sand 30 - 31 Sand 8 - 31 Bentonite 31 - 33 Sand 33 - 50 Abandon Well 11/11/11	

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13
STR. NO. _____ LAT. _____ LONG _____
INSPECTOR Raymond D. Glenn
DRILLERS NAME/COMPANY Earl Dye/Penn Drill
EQUIPMENT USED CME 85 Truck Mount
DRILLING METHODS 4-1/4 HSA

BORING NO. B-2
SHEET 1 OF 2
DATE: START 11/1/11
O.G. END 11/2/11
ELEV. 760.0

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.1' TIME: 0 DATE: _____
CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.2' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (FT.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
0.6								0.6' Concrete	
S-1	16 10 11	1.3'	-		SP	-		Sand and Slag, medium dense, brown	Fill 0.0PPM
2.1									
5.0									
S-2	25 28 27	1.5'	-		SP/GP	-		Sand, Gravel, some Slag, moist, very dense, brown	Fill 0.0PPM
6.5									Environmental Sample at 6.0
10.0									
S-3	50/0.3	0.3'	-		GP	-		Slag, dry, very dense, green-white	0.0PPM
10.3									
15.0									
S-4	38 35 14	1.4'	-		GP	-		Slag with some sand, moist, very dense, gray-white	0.0PPM
16.5									Environmental sample to lab
20.0									

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13
STR. NO. _____ LAT. _____ LONG _____
INSPECTOR Raymond D. Glenn
DRILLERS NAME/COMPANY Earl Dye/Penn Drill
EQUIPMENT USED CME 85 Truck Mount
DRILLING METHODS 4-1/4 HSA

BORING NO. B-2
SHEET 2 OF 2
DATE: START 11/1/11
O.G. END 11/2/11
ELEV. 760.0

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.1' TIME: 0 DATE: _____
CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.2' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
20.6	S-5	40	0.6'	-		GP	-		Slag, wet to saturated, very dense, gray-white	0.0PPM
25.0		50/0.1								
25.2	S-6	50/0.2	0.2'	-		GP	-			0.0PPM
28.0									28.0	
29.5	S-7	45	0.8'	-		GP	-		Slag, saturated, very dense, gray	0.0 PPM
30.0		50/.3								
30.0				14		GP			1.0' Steel Slab, very hard, gray (No Recovery)	0.0PPM
35.0	R-1	NA	0.7'		NA		-			
35.0				0					35.0	
									Bottom of Boring at 35.0	
									B-2 Monitoring Well installation Cuttings 0 - 5 Bentonite 5 - 7 Sand 7 - 30 Screen 10 - 30 2" PVC 0.010 slot Abandoned 11/11/11	

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-3
SHEET	1 OF 4
DATE: START	11/10/11
O.G. END	11/10/11
ELEV.	

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR Raymond D. Glenn

DRILLERS NAME/COMPANY Earl Dye/Penn Drill

EQUIPMENT USED CME 85 Truck Mount

DRILLING METHODS 4-1/4 HSA

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.0' TIME: 0 DATE: _____

CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.0' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
0.0	S-1	7	1.1'	-		GP	-	Coke and Slag, dry, dense, black	0.0PPM
1.5		8							
5.0	S-2	7	1.3'	-		GP	-	Slag and Sand, moist, very dense, gray-black	Environmental sample to lab 0.0PPM
6.5		20 41							
10.0	S-3	50/0.1	0.1'	-		GP	-	(Concrete)~1.5' thick	0.0PPM
10.1									
15.0	S-4	80/.3	0.3'	-		GP	-	(Concrete)~1.0' thick	0.0 PPM Environmental sample to lab
15.3									
20.0									

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-3
SHEET	2 OF 4
DATE: START	11/10/11
O.G. END	11/10/11
ELEV.	

PROJECT NAME **USS-Clairton** PROJECT NUMBER **C071418.13**

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR **Raymond D. Glenn**

DRILLERS NAME/COMPANY **Earl Dye/Penn Drill**

EQUIPMENT USED **CME 85 Truck Mount**

DRILLING METHODS **4-1/4 HSA**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: **16.0'** TIME: **0** DATE: _____

CHECKED BY: **RDG** ; DATE: **11/16/2011** DEPTH: **16.0'** TIME: **12** DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
20.1	S-5	50/0.1	0.1'	-		GP	-	Slag, saturated, very dense, grey	0.0PPM
25.0									
26.0	S-6	25 90	1.0'	-		GP	-	- white-gray	0.0PPM
30.0									
30.2	S-7	76/0.2	0.2'	-		GP	-	Slag and Sand, saturated, very dense, grey	0.0PPM
35.0									
36.5	S-8	2 2 3	0.5'	-		ML	-	Silt, some Sand, saturated, very soft, black	Alluvium 0.0PPM 0.5 TSF
40.0									

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-3
SHEET	3 OF 4
DATE: START	11/10/11
O.G. END	11/10/11
ELEV.	

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR Raymond D. Glenn

DRILLERS NAME/COMPANY Earl Dye/Penn Drill

EQUIPMENT USED CME 85 Truck Mount

DRILLING METHODS 4-1/4 HSA

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.0' TIME: 0 DATE: _____

CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.0' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (FL)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
41.5	S-9	1 2 5	0.5'	-		ML	-	Silt, some Sand, saturated, very soft, black (continued)	0.0PPM 0.5 TSF
45.0									
46.5	S-10	2 3 4	0.5'	-		SP	-	Sand with Silt, trace rounded gravel, saturated, loose, gray	0.0PPM
50.0									
51.5	S-11	8 8 10	1.2'	-		GW	-	Rounded Gravel, with Sand and Shale partings, saturated, dense, black	0.0PPM
54.0									
54.1	S-12	50/1	0.0'	-		GW	-		Hit rock @ 53' while augering 54' TOR
55.0									
				92				Claystone, slightly broken, soft to medium hard, gray	
	R-1	NA	4.6'		NA	NA	-		
60.0				88					

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-3
SHEET	4 OF 4
DATE: START	11/10/11
O.G. END	11/10/11
ELEV.	

PROJECT NAME **USS-Clairton** PROJECT NUMBER **C071418.13**

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR **Raymond D. Glenn**

DRILLERS NAME/COMPANY **Earl Dye/Penn Drill**

EQUIPMENT USED **CME 85 Truck Mount**

DRILLING METHODS **4-1/4 HSA**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: **16.0'** TIME: **0** DATE: _____

CHECKED BY: **RDG** ; DATE: **11/16/2011** DEPTH: **16.0'** TIME: **12** DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%) RQD (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
65.0	R-2	NA	5.0'	100	NA	NA	-	- with red mottling, broken	
				78				Bottom of Boring at 65.0'	

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-4
SHEET	1 OF 3
DATE: START	11/7/11
O.G. END	11/7/11
ELEV.	

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR Raymond D. Glenn

DRILLERS NAME/COMPANY Earl Dye/Penn Drill

EQUIPMENT USED CME 85 Truck Mount

DRILLING METHODS 4-1/4 HSA

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.1' TIME: 0 DATE: _____

CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.1' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (FT.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
1.0								Concrete	
1.0								Slag and Sand, moist, very loose, black	Fill 0.0PPM
2.5	S-1	7 1 2	0.5'	-		GP	-		
5.0									
5.0								Slag and Sand, moist-dry, very dense, gray	Environmental Sample 5-6.5 to lab 0.0PPM
6.5	S-2	31 45 20	1.4'	-		GP	-		
10.0									
10.0								Slag, moist, very dense, blue-green	0.0PPM
11.2	S-3	38 50 50/2	1.0'	-		GP	-		
15.0									
15.0								Slag, moist, very dense, gray	0.0PPM
16.3	S-4	25 47 50/3	1.2'	-		GP	-		Environmental sample to lab
20.0									
20.0									

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-4
SHEET	2 OF 3
DATE: START	11/7/11
O.G. END	11/7/11
ELEV.	

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR Raymond D. Glenn

DRILLERS NAME/COMPANY Earl Dye/Penn Drill

EQUIPMENT USED CME 85 Truck Mount

DRILLING METHODS 4-1/4 HSA

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.1' TIME: 0 DATE: _____

CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.1' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
21.2	S-5	60 47 50/2	1.1'	-		GP	-	Slag, saturated, very dense, gray	Spoon wet 0.0PPM
25.0									
25.3	S-6	50/3	0.3'	-		GP	-	Slag, very dense, gray	0.0PPM
30.0									
31.2	S-7	12 17 50/2	1.2'	-		GP	-	Slag and medium Sand, saturated, very dense, gray	0.0PPM
35.0									
36.5	S-8	8 10 11	1.5'	-		ML	-	Silt, very stiff, moist to wet, stiff, dark gray	Alluvium 1.5 TSF 0.0PPM
40.0									

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-4
SHEET	3 OF 3
DATE: START	11/7/11
O.G. END	11/7/11
ELEV.	

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR Raymond D. Glenn

DRILLERS NAME/COMPANY Earl Dye/Penn Drill

EQUIPMENT USED CME 85 Truck Mount

DRILLING METHODS 4-1/4 HSA

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.1' TIME: 0 DATE: _____

CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.1' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
41.5	S-9	7 7	1.2'	-		ML	-	Silt, very stiff, moist to wet, stiff, dark gray (continued)	0.0PPM 0.75 TSF
45.0									
46.5	S-10	20 22 10	1.2'	-		ML	-	Silt, very stiff, moist to wet, very stiff, dark gray -trace Shale in tip of spoon	1.5 TSF 0.0PPM
48.5									
49.0	S-11	10 20 35	1.5'	-		ML	-	Decomposed Claystone, very dense, red	Decomposed Rock
50.0								Bottom of Boring at 50.0'	
								Monitoring Well B-4 Cuttings 0 - 6 Bentonite 6 - 8 Sand 8 - 10 Screen 10 - 30 (2" PVC, 0.010 Slot) Sand 30 - 31 Bentonite 31 - 33 Sand 33 - 50 Abandoned 11/10/11	

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-5
SHEET	1 OF 4
DATE: START	11/4/11
O.G. END	11/10/11
ELEV.	

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR Raymond D. Glenn

DRILLERS NAME/COMPANY Earl Dye/Penn Drill

EQUIPMENT USED CME 85 Truck Mount

DRILLING METHODS 4-1/4 HSA

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.3' TIME: 0 DATE: _____

CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.3' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
1.0								Concrete Slab	Pusher Pad
2.5	S-1	35 15 8	1.3'	-		GP	-	Slag and Sand, trace coal, dry, medium dense, brown	Fill 0.0PPM
5.0									
6.5	S-2	5 3 8	1.0'	-		GP	-	Slag, moist, medium dense, black-white	0.0PPM Sample to lab for environmental testing
10.0									
10.3	S-3	50/3	0.3'	-		GP	-	- very dense, white-green	0.0PPM
15.0									
16.5	S-4	70 31 17	1.0'	-		GP	-		0.0PPM Sample to lab for environmental testing
20.0								- become saturated 16.4	

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-5
SHEET	2 OF 4
DATE: START	11/4/11
O.G. END	11/10/11
ELEV.	

PROJECT NAME USS-Clairton PROJECT NUMBER C071418.13

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR Raymond D. Glenn

DRILLERS NAME/COMPANY Earl Dye/Penn Drill

EQUIPMENT USED CME 85 Truck Mount

DRILLING METHODS 4-1/4 HSA

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: 16.3' TIME: 0 DATE: _____

CHECKED BY: RDG ; DATE: 11/16/2011 DEPTH: 16.3' TIME: 12 DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (FT.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
21.5	S-5	45 60 37	1.3'	-		GP	-	- very dense, gray-black	0.0PPM
25.0									
26.5	S-6	31 25 15	1.3'	-		GP	-	Slag and Sand, saturated, very dense, brown-gray	0.0PPM
30.0									
31.5	S-7	3 7 10	1.0'	-		GP	-	Slag, saturated, medium dense, gray-black	0.0PPM
35.0									
36.5	S-8	17 10 10	1.1'	-		GP	-		0.0PPM
40.0									

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO.	B-5
SHEET	4 OF 4
DATE: START	11/4/11
O.G. END	11/10/11
ELEV.	

PROJECT NAME **USS-Clairton** PROJECT NUMBER **C071418.13**

STR. NO. _____ LAT. _____ LONG _____

INSPECTOR **Raymond D. Glenn**

DRILLERS NAME/COMPANY **Earl Dye/Penn Drill**

EQUIPMENT USED **CME 85 Truck Mount**

DRILLING METHODS **4-1/4 HSA**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: **16.3'** TIME: **0** DATE: _____

CHECKED BY: **RDG** ; DATE: **11/16/2011** DEPTH: **16.3'** TIME: **12** DATE: _____

NOT ENCOUNTERED ☐

DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (Ft.)	RECOVERY(%)	RQD (%)	POCKET PENT/ TORVANE (TSF)	USCS	AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
										END OF BORING at 60.0	
										Monitoring Well B-5	
										Cuttings 0-6	
										Bent 6-8	
										Sand 8-30	
										Screen 10-30 (29.55) *Screen pulled up due to	
										slag binding augers (2" PVC, 0.010 Slot)	
										Sand 30-31	
										Bent 31-33	
										Sand 33-35	
										Note: B-5 Originally drilled to 50.0'. The well was	
										installed. At a later date, the PVC was removed	
										and the boring was augered to 50.0', then cored	
										(NQ) to 60.0' BGS.	
										Well abandoned 11/10/11	

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

ENGINEERS FIELD BORING LOG

BORING NO. **B-6A - B-6F**
SHEET **1** OF **1**
DATE: START **11/8/11**
O.G. END **11/9/11**
ELEV. _____

PROJECT NAME **USS-Clairton** PROJECT NUMBER **C071418.13**
STR. NO. _____ LAT. _____ LONG _____
INSPECTOR **Raymond D. Glenn**
DRILLERS NAME/COMPANY **Earl Dye/Penn Drill**
EQUIPMENT USED **CME 85 Truck Mount**
DRILLING METHODS **4-1/4 HSA**

CASING: SIZE: _____ ; DEPTH: _____ ; WATER: DEPTH: _____ TIME: _____ DATE: _____
CHECKED BY: **RDG** ; DATE: **11/16/2011** DEPTH: _____ TIME: _____ DATE: _____

NOT ENCOUNTERED ☐

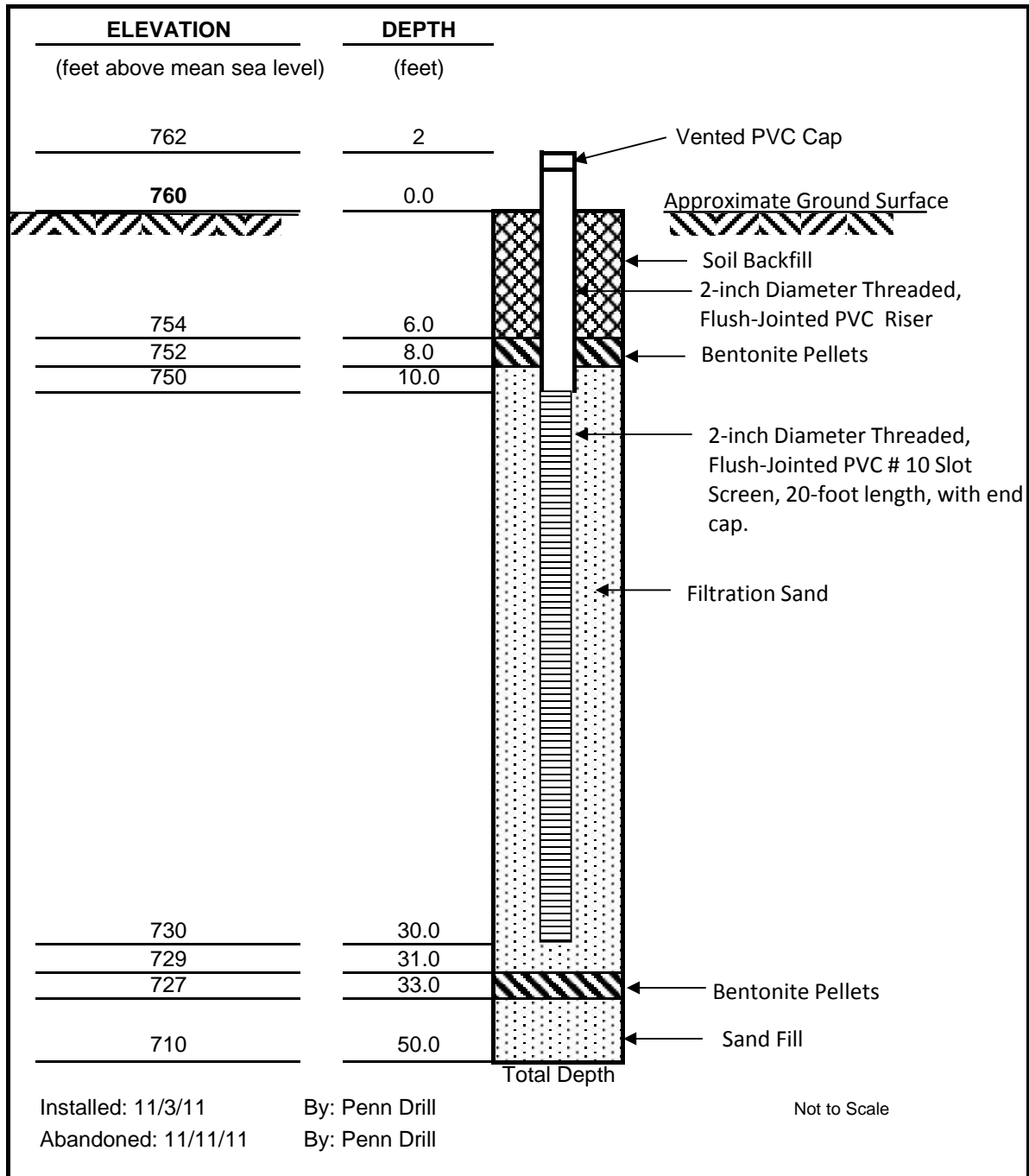
DEPTH (FT)	SAMPLE NO./ TYPE/CORE RUN	BLOWS/0.5 FT. ON SAMPLER	RECOVERY (FT.)	RECOVERY (%)	POCKET PENT/ TORVANE (TSF)	USCS AASHTO	H ₂ O CONTENT	DESCRIPTION	REMARKS
0.0	S-1	9	1.1'	-		GP	-	Slag and Construction Debris, very dense black/gray	0.0PPM
1.5		10							
5.0	S-2	3	1.4'	-		GP	-		0.0PPM
6.5		7 3							
10.0	S-3	25	0.6'	-		GP	-		0.0PPM
11.5		50/0.1							
11.5								END OF BORING at 11.5'	
								<p>*Boring offset 6 times (A,B,C,D,E,F) due to obstructions at 5.0' and 10.0'. Total drilling = 56.0' lineal feet.</p> <p>*Will advance B-5 from TOR to obtain rock core 50.0 - 60.0</p>	

NOTE: STRATIFICATION LINES AT THE APPROXIMATE BOUNDARY BETWEEN SOIL AND ROCK TYPES FOR THIS BORING

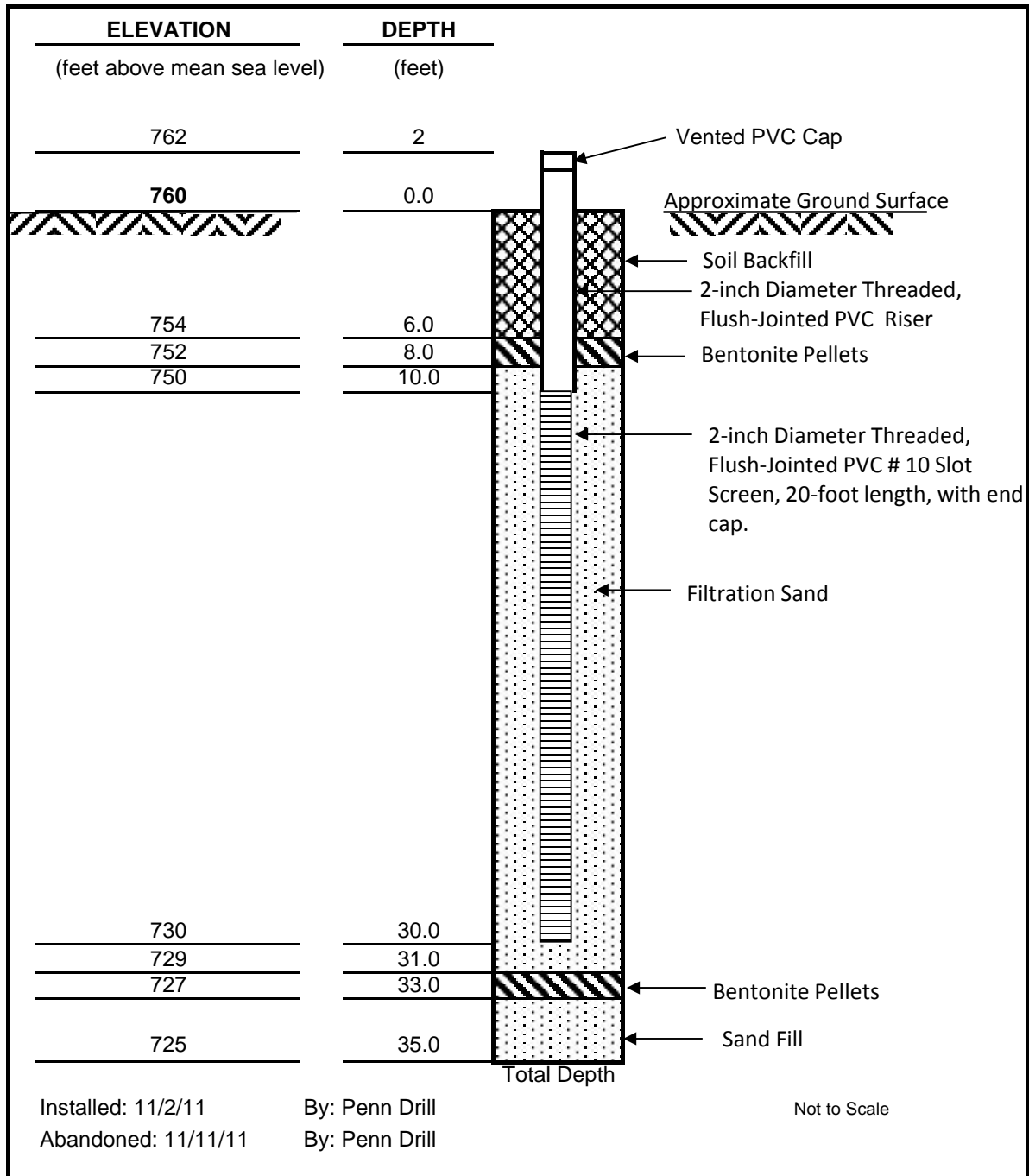
Geotechnical and Environmental Exploration,
5A and 7A Quench Towers, US Steel Clairton Works, Clairton, Pennsylvania

APPENDIX B
TEMPORARY MONITORING WELL DETAIL

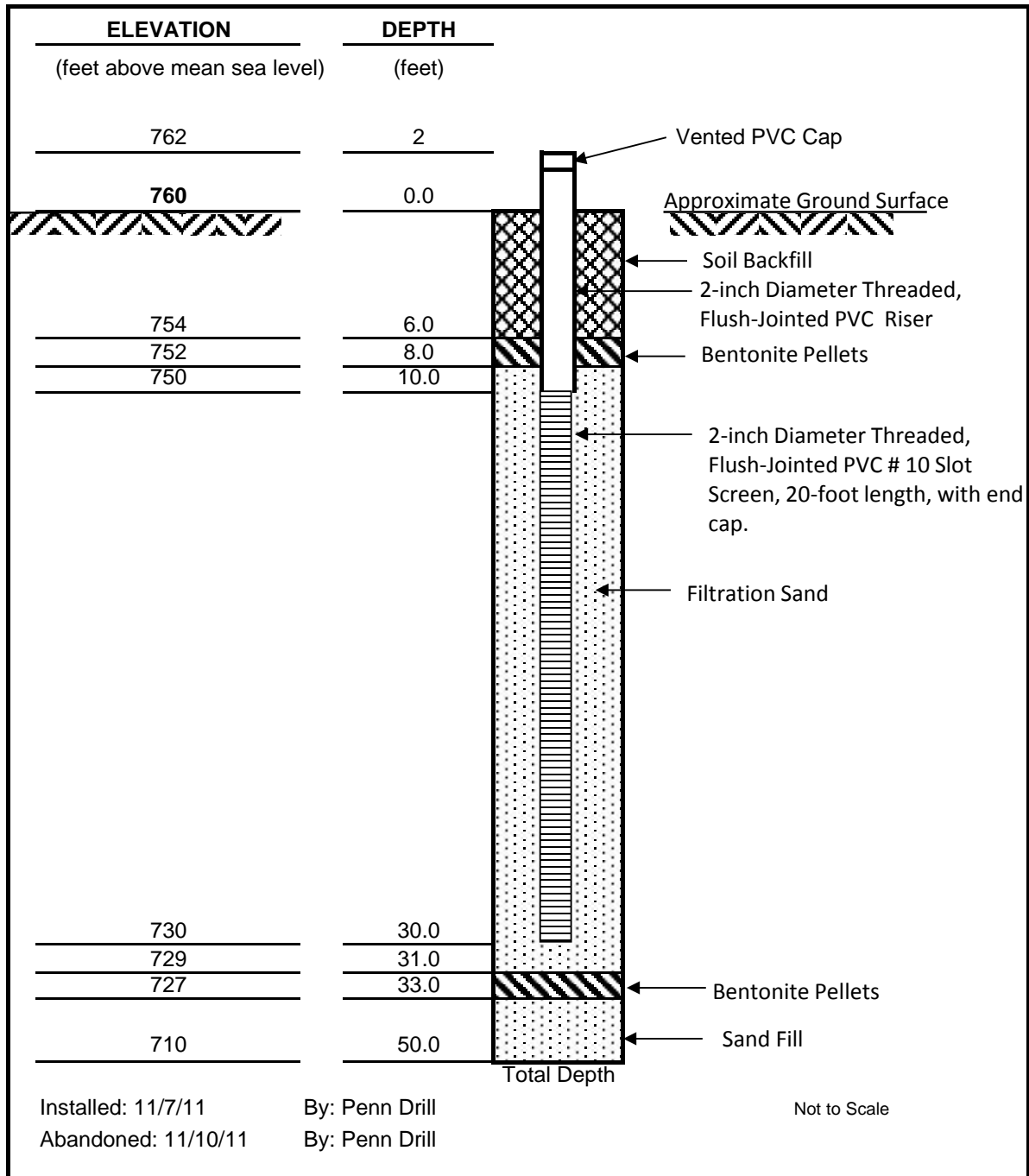
B-1
 Temporary Monitoring Well
 5A and 7A Quench Tower Project
 United States Steel Corporation, Clairton Works
 GAI Project C071418.13



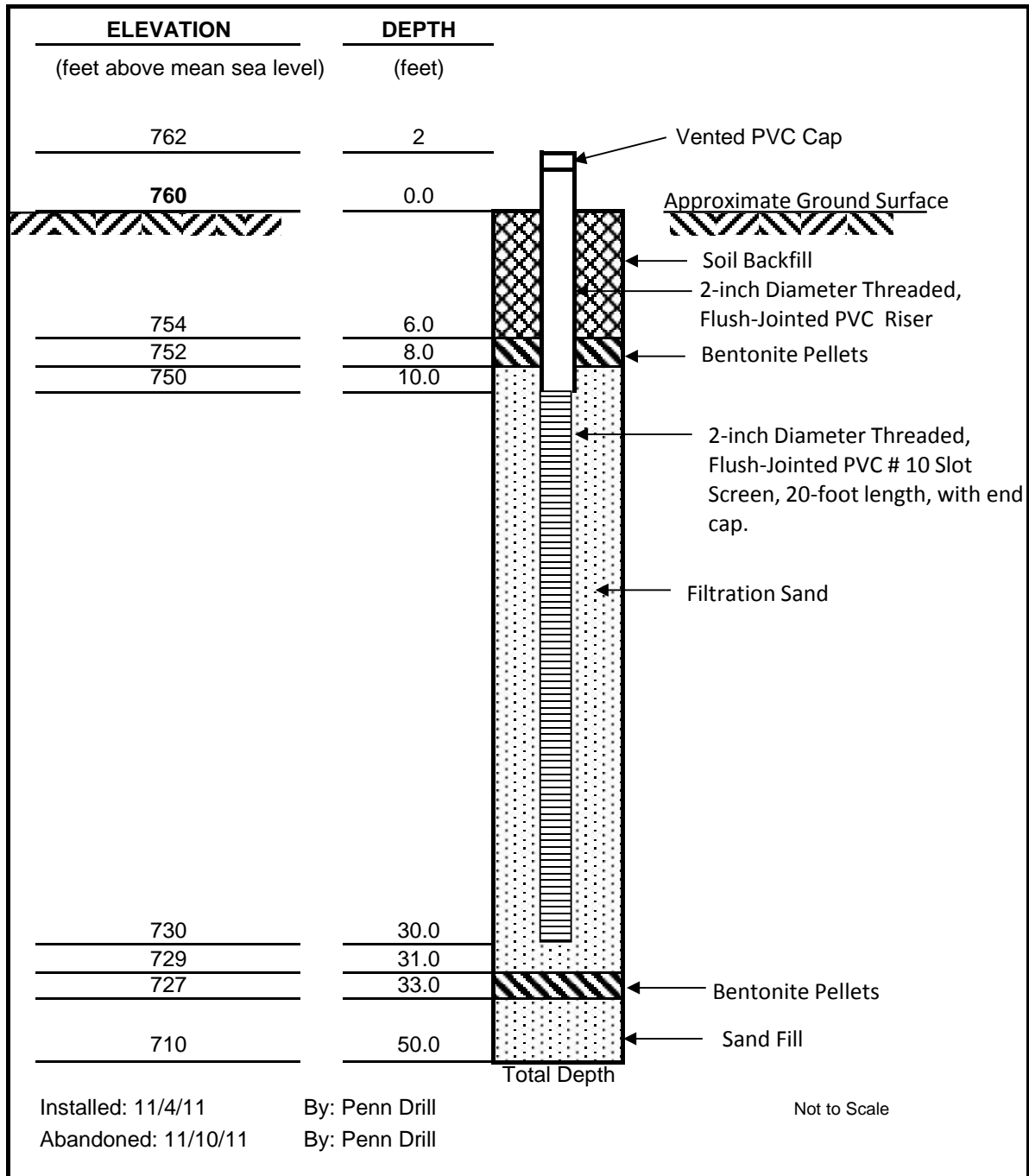
B-2
 Temporary Monitoring Well
 5A and 7A Quench Tower Project
 United States Steel Corporation, Clairton Works
 GAI Project C071418.13



B-4
 Temporary Monitoring Well
 5A and 7A Quench Tower Project
 United States Steel Corporation, Clairton Works
 GAI Project C071418.13



B-5
 Temporary Monitoring Well
 5A and 7A Quench Tower Project
 United States Steel Corporation, Clairton Works
 GAI Project C071418.13



Geotechnical and Environmental Exploration,
5A and 7A Quench Towers, US Steel Clairton Works, Clairton, Pennsylvania

APPENDIX C
ENVIRONMENTAL LABORATORY TEST RESULTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-5622-1

Client Project/Site: USS Clairton - C071418.13

Revision: 1

For:

GAI Consultants

385 East Waterfront Drive

Homestead, Pennsylvania 15120

Attn: Mr. John R Boulanger



Authorized for release by:

12/14/2011 2:59:34 PM

Kathryn Bort

Project Manager II

kathy.bort@testamericainc.com

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results through

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Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Job ID: 180-5526-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-5526-1

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

Method 8260B: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 19977 exceeded control limits for the following analytes: Acetone, which is not a control compound.

GC/MS Semi VOA

Method 8270C: The laboratory control sample duplicate (LCSD) for batch 19851 exceeded control limits for the following analytes: Atrazine. This analyte was biased high in the LCSD and was not detected in the associated samples and is not a required method QC compound; therefore, the data have been reported.

Method 8270C: Surrogate recovery for the following samples was outside control limits: B-1 (6')-11/3/11 (180-5526-3), B-2 (16')-11/2/11 (180-5526-2), B-2 (6')-11/2/11 (180-5526-1). Re-extraction and/or re-analysis was performed with concurring results. Both sets of data have been reported.

Method 8270C: Surrogate recovery for the following samples was outside control limits: B-1 (6')-11/3/11 (180-5526-3), B-2 (16')-11/2/11 (180-5526-2), B-2 (6')-11/2/11 (180-5526-1). Evidence of matrix interference is present; Re-extraction was performed. Reextraction was within sample reextraction HT and confirmed initial analysis. Therefore, both sets of data will be reported.

GC Semi VOA

No analytical or quality issues were noted.

Metals

Method 6010B: The following sample was diluted due to the abundance of target analytes: B-1 (15')-11/3/11 (180-5526-4). Elevated reporting limits (RLs) are provided. The concentration of manganese in the sample was above the linear range and required dilution. Silver, chromium, selenium, and thallium were also diluted due to inter-element correction factors associated with manganese.

Method 6010B: The following sample was diluted due to the abundance of target analytes: B-1 (6')-11/3/11 (180-5526-3). Elevated reporting limits (RLs) are provided. The concentration of manganese in the sample was above the linear range and required dilution. Silver, chromium, selenium, and thallium were also diluted due to inter-element correction factors associated with manganese.

Method 6010B: The following sample was diluted due to the abundance of target analytes: B-2 (6')-11/2/11 (180-5526-1). Elevated reporting limits (RLs) are provided. The concentration of barium and manganese in the sample was above the linear range and required dilution. Silver, chromium, selenium, and thallium were also diluted due to inter-element correction factors associated with manganese.

General Chemistry

No analytical or quality issues were noted.

Job ID: 180-5622-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-5622-1

Receipt

Case Narrative

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Job ID: 180-5622-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

GC/MS Semi VOA

Method 8270C: The matrix spike (MS) recoveries for batch 20532 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

GC Semi VOA

No analytical or quality issues were noted.

Metals

Method 6010B: The following sample was diluted due to the abundance of target analytes: B-5(16')-11/4/11 (180-5622-2), B-5(6')-11/4/11 (180-5622-1). Elevated reporting limits (RLs) are provided. The concentration of manganese in the sample was above the linear range and required dilution. Silver, chromium, selenium, and thallium were also diluted due to inter-element correction factors associated with manganese.

General Chemistry

No analytical or quality issues were noted.

Job ID: 180-5679-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-5679-1

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

Method 8260B: The following samples were diluted due to the abundance of target analytes: B-4W-11-8-11 (180-5679-5), B-5W-11-8-11 (180-5679-4). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method 8270C: The following sample was diluted due to the nature of the sample matrix: B-6 (6')-11-8-11 (180-5679-3). Elevated reporting limits (RLs) are provided.

Method 8270C: The matrix spike (MS) recoveries for batch 20532 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8270C: Surrogate recovery for the following sample(s) was outside control limits: B-4 (6')-11-7-11 (180-5679-1). Re-extraction and/or re-analysis was performed with concurring results. Both sets of data have been reported.

Method 8270C: The laboratory control sample (LCS) for batch 21153 exceeded control limits for the following analytes: 2-naphthylamine. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270C: No matrix spike was added to these samples. Samples require reextraction due to client requested QC.

Method 8270C LL: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for batch 20608 exceeded control limits for the following analyte: Benzaldehyde has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Case Narrative

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Job ID: 180-5679-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

Method 8270C LL: The following samples were diluted due to the abundance of target analytes: B-4W-11-8-11 (180-5679-5), B-5W-11-8-11 (180-5679-4). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC Semi VOA

Method 8081A: The continuing calibration verification (CCV) for d-BHC, DDD, Methoxychlor, Endrin Ketone associated with batch 22196 recovered above the upper control limit. Most samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. Some samples were run multiple times each time similar issues happened to the closing CCV.

No other analytical or quality issues were noted.

Metals

Method 6010B: Due to the high concentration of calcium and sodium, the matrix spike / matrix spike duplicate (MS/MSD) for batch 180-20226 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 6010B: The following sample was diluted due to the abundance of target analytes: B-4 (16')-11-7-11 (180-5679-2). Elevated reporting limits (RLs) are provided. The concentration of manganese in the sample was above the linear range and required dilution. Silver, chromium, selenium, and thallium were also diluted due to inter-element correction factors associated with manganese.

No other analytical or quality issues were noted.

General Chemistry

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 20377 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 350.1: The following samples in batch 20377 were diluted due to the abundance of target analytes: B-4W-11-8-11 (180-5679-5), B-5W-11-8-11 (180-5679-4). Elevated reporting limits (RLs) are provided.

Method 7196A: The matrix soluble spike and post digestion spike (MSS/PDS) recoveries for batch 21789 were outside of control limits. The associated laboratory control sample (LCSS/LCSI) recoveries met acceptance criteria, which demonstrates that the analytical system was operating in control. This condition is most likely due to a matrix interference. An ORP was performed for sample 180-5679-a-2, and the chart is included in the report. This is the first analysis of the batch; a reanalysis will be performed in accordance with the SOP.

Method 7196A: The matrix soluble spike and post digestion spike (MSS/PDS) recoveries for batch 21877 were outside of control limits. The associated laboratory control sample (LCSS/LCSI) recoveries met acceptance criteria, which demonstrates that the analytical system was operating in control. This condition is most likely due to a matrix interference. An ORP was performed for sample 180-5679-2 and the chart is included in the report. This is the second analysis of the batch in accordance with the SOP.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Job ID: 180-5712-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-5712-1

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

Case Narrative

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Job ID: 180-5712-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

Method 8260B: The following sample was diluted due to the abundance of non-target analytes: B-1W-11-9-11 (180-5712-2). Elevated reporting limits (RLs) are provided. Batch #21590.

Method 8260B: An LCS/LCSD was run for Batch 21590 in place of an MS/MSD.

GC/MS Semi VOA

Method 8270C LL: The following sample(s) was diluted due to the abundance of target analytes: B-1W-11-9-11 (180-5712-2), B-2W-11-9-11 (180-5712-1). Elevated reporting limits (RLs) are provided.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Job ID: 180-5830-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-5830-1

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

The method blank had naphthalene detected between the MDL and the reporting limit. The result was flagged with a "J" qualifier. Any sample that had this compound detected had the result flagged with a "B" qualifier.

GC/MS Semi VOA

Atrazine was out of the control limits in the LCS. All other compounds were in control.

There were no other problems associated with the analysis.

Pesticides

Sample B-3(6')-11/10/11 (180-5830-1) was analyzed at a dilution due to matrix. This sample had the surrogates diluted out.

The MS/MSD of sample B-3(6')-11/10/11 (180-5830-1) had the surrogates and the spikes diluted out.

PCBs

There were no problems associated with the analysis

Herbicides

There were no problems associated with the analysis.

Metals

Sample B-3(16')-11/10/11 (180-5830-2) was over the instruments linear range for managanes and required a dilution. This sample was also analyzed at a dilution for silver, chromium, selenium, and thallium due to inter-element corrections associated with manganese. The reporting limits are adjsuted accordingly.

The method blank had analytes detected between the MDL and the reporting limit. The results were flagged with a "J" qualifier. Any

Case Narrative

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Job ID: 180-5830-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

sample that had these compounds detected had the results flagged with a "B" qualifier.

General Chemistry

Sample B-3(6')-11/10/11 (180-5830-1) was analyzed at a dilution for total cyanide.

The leach blanks had analytes detected between the MDL and the reporting limit. The results were flagged with a "J" qualifier.

The batch QC matrix spikes recovered outside of the control limits for hexavalent chromium. The associated samples were re-digested and re-analyzed. The matrix spikes again recovered outside of the control limits confirming matrix interference. Both sets of results are reported.

Definitions/Glossary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control limits
E	Result exceeded calibration range.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Definitions/Glossary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Qualifiers (Continued)

Metals (Continued)

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	Duplicate RPD exceeds the control limit
F	MS or MSD exceeds the control limits
HF	Field parameter with a holding time of 15 minutes
HF	Field parameter with a holding time of 15 minutes
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pittsburgh	ACCLASS	DoD ELAP		ADE-1422
TestAmerica Pittsburgh	Arkansas	State Program	6	88-0690
TestAmerica Pittsburgh	California	NELAC	9	4224CA
TestAmerica Pittsburgh	Connecticut	State Program	1	PH-0688
TestAmerica Pittsburgh	Florida	NELAC	4	E871008
TestAmerica Pittsburgh	Illinois	NELAC	5	002602
TestAmerica Pittsburgh	Kansas	NELAC	7	E-10350
TestAmerica Pittsburgh	Louisiana	NELAC	6	04041
TestAmerica Pittsburgh	New Hampshire	NELAC	1	203011
TestAmerica Pittsburgh	New Jersey	NELAC	2	PA005
TestAmerica Pittsburgh	New York	NELAC	2	11182
TestAmerica Pittsburgh	North Carolina	North Carolina DENR	4	434
TestAmerica Pittsburgh	Pennsylvania	NELAC	3	02-00416
TestAmerica Pittsburgh	Pennsylvania	State Program	3	02-416
TestAmerica Pittsburgh	South Carolina	State Program	4	89014002
TestAmerica Pittsburgh	USDA	USDA		P330-10-00139
TestAmerica Pittsburgh	USDA	USDA		P-Soil-01
TestAmerica Pittsburgh	Utah	NELAC	8	STLP
TestAmerica Pittsburgh	Virginia	NELAC	3	460189
TestAmerica Pittsburgh	West Virginia	West Virginia DEP	3	142
TestAmerica Pittsburgh	Wisconsin	State Program	5	998027800
TestAmerica North Canton	ACCLASS	DoD ELAP		ADE-1437
TestAmerica North Canton	California	NELAC	9	01144CA
TestAmerica North Canton	Connecticut	State Program	1	PH-0590
TestAmerica North Canton	Florida	NELAC	4	E87225
TestAmerica North Canton	Georgia	Georgia EPD	4	N/A
TestAmerica North Canton	Illinois	NELAC	5	200004
TestAmerica North Canton	Kansas	NELAC	7	E-10336
TestAmerica North Canton	Kentucky	State Program	4	58
TestAmerica North Canton	Minnesota	NELAC	5	039-999-348
TestAmerica North Canton	Nevada	State Program	9	OH-000482008A
TestAmerica North Canton	New Jersey	NELAC	2	OH001
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	Ohio	OVAP	5	CL0024
TestAmerica North Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica North Canton	USDA	USDA		P330-11-00328
TestAmerica North Canton	Virginia	NELAC Secondary AB	3	460175
TestAmerica North Canton	West Virginia	West Virginia DEP	3	210
TestAmerica North Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Sample Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-5526-1	B-2 (6')-11/2/11	Solid	11/02/11 08:20	11/03/11 11:15
180-5526-2	B-2 (16')-11/2/11	Solid	11/02/11 08:50	11/03/11 11:15
180-5526-3	B-1 (6')-11/3/11	Solid	11/03/11 09:00	11/03/11 11:15
180-5526-4	B-1 (15')-11/3/11	Solid	11/03/11 09:50	11/03/11 11:15
180-5622-1	B-5(6')-11/4/11	Solid	11/04/11 09:00	11/04/11 13:00
180-5622-2	B-5(16')-11/4/11	Solid	11/04/11 09:30	11/04/11 13:00
180-5679-1	B-4 (6')-11-7-11	Solid	11/07/11 09:30	11/08/11 16:09
180-5679-2	B-4 (16')-11-7-11	Solid	11/07/11 10:30	11/08/11 16:09
180-5679-3	B-6 (6')-11-8-11	Solid	11/08/11 09:00	11/08/11 16:09
180-5679-4	B-5W-11-8-11	Water	11/08/11 12:30	11/08/11 16:09
180-5679-5	B-4W-11-8-11	Water	11/08/11 14:00	11/08/11 16:09
180-5712-1	B-2W-11-9-11	Water	11/09/11 12:30	11/09/11 15:19
180-5712-2	B-1W-11-9-11	Water	11/09/11 14:00	11/09/11 15:19
180-5830-1	B-3(6')-11/10/11	Solid	11/10/11 09:00	11/11/11 12:30
180-5830-2	B-3(16')-11/10/11	Solid	11/10/11 10:00	11/11/11 12:30

Method Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL PIT
8081A	Organochlorine Pesticides (GC)	SW846	TAL PIT
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PIT
8151A	Herbicides (GC)	SW846	TAL PIT
6010B	Metals (ICP)	SW846	TAL PIT
6010B	Lead	SW846	TAL PIT
7470A	Mercury (CVAA)	SW846	TAL PIT
7471A	Mercury (CVAA)	SW846	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
350.1	Nitrogen, Ammonia	MCAWW	TAL PIT
410.4	COD	MCAWW	TAL PIT
7196A	Chromium, Hexavalent	SW846	TAL PIT
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL PIT
9012A	Cyanide, Total and/or Amenable	SW846	TAL PIT
9040B	pH	SW846	TAL PIT
9056A	Anions, Ion Chromatography	SW846	TAL PIT
Moisture	Percent Moisture	EPA	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT
SM 4500 CN E	Cyanide, Total	SM	TAL NC
SM 4500 CN I	Cyanide, Weak Acid Dissociable	SM	TAL NC

Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (6')-11/2/11

Date Collected: 11/02/11 08:20

Date Received: 11/03/11 11:15

Lab Sample ID: 180-5526-1

Matrix: Solid

Percent Solids: 74.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	18	4.5	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Benzene	ND		4.5	0.60	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Bromodichloromethane	ND		4.5	0.50	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Bromoform	ND		4.5	0.39	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Bromomethane	ND		4.5	0.66	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
2-Butanone (MEK)	ND		4.5	0.79	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Carbon disulfide	ND		4.5	0.46	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Carbon tetrachloride	ND		4.5	0.40	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Chlorobenzene	ND		4.5	0.68	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Chloroethane	ND		4.5	1.4	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Chloroform	ND		4.5	0.52	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Chloromethane	ND		4.5	0.76	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Dibromochloromethane	ND		4.5	0.63	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,1-Dichloroethane	ND		4.5	0.51	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,2-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,1-Dichloroethene	ND		4.5	0.76	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Acetonitrile	ND		89	20	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,2-Dichloropropane	ND		4.5	0.48	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
cis-1,3-Dichloropropene	ND		4.5	0.60	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
trans-1,3-Dichloropropene	ND		4.5	0.53	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Ethylbenzene	ND		4.5	0.57	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
2-Hexanone	ND		4.5	0.62	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Methylene Chloride	0.97	J B	4.5	0.60	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
4-Methyl-2-pentanone (MIBK)	ND		4.5	0.58	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Bromochloromethane	ND		4.5	0.61	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Styrene	ND		4.5	0.63	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,1,2,2-Tetrachloroethane	ND		4.5	0.64	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Tetrachloroethene	ND		4.5	0.61	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,1,1-Trichloroethane	ND		4.5	0.43	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,1,2-Trichloroethane	ND		4.5	0.74	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Trichloroethene	ND		4.5	0.59	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Vinyl chloride	ND		4.5	0.42	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Xylenes, Total	ND		13	2.0	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Cyclohexane	ND		4.5	0.33	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,2-Dibromo-3-Chloropropane	ND		4.5	0.67	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,2-Dibromoethane (EDB)	ND		4.5	0.77	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Dichlorodifluoromethane	ND		4.5	0.59	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
cis-1,2-Dichloroethene	ND		4.5	0.63	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
trans-1,2-Dichloroethene	ND		4.5	0.53	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Isopropylbenzene	ND		4.5	0.61	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Methyl acetate	ND		4.5	0.80	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Methylcyclohexane	ND		4.5	0.65	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Methyl tert-butyl ether	ND		4.5	0.67	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Trichlorofluoromethane	ND		4.5	0.82	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	0.95	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,2-Dichlorobenzene	ND		4.5	0.71	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,3-Dichlorobenzene	ND		4.5	0.58	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,4-Dichlorobenzene	ND		4.5	0.57	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,2,4-Trichlorobenzene	ND		4.5	0.79	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Toluene	ND		4.5	0.65	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (6')-11/2/11

Lab Sample ID: 180-5526-1

Date Collected: 11/02/11 08:20

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 74.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		4.5	0.68	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,2,3-Trichloropropane	ND		4.5	0.83	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,3,5-Trimethylbenzene	ND		4.5	0.60	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
tert-Butylbenzene	ND		4.5	0.63	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
1,2,4-Trimethylbenzene	ND		4.5	0.58	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
sec-Butylbenzene	ND		4.5	0.70	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
n-Butylbenzene	ND		4.5	0.71	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Hexachlorobutadiene	ND		4.5	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Naphthalene	1.1	J B	4.5	0.90	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Acrolein	ND		89	6.3	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Acrylonitrile	ND		89	9.2	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Methacrylonitrile	ND		4.5	0.26	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Isobutyl alcohol	ND		180	23	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Methyl methacrylate	ND		4.5	0.61	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Ethyl methacrylate	ND		4.5	0.38	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Vinyl acetate	ND		4.5	0.32	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1
Hexane	ND		4.5	0.90	ug/Kg	☼	11/08/11 04:08	11/08/11 09:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		52 - 124	11/08/11 04:08	11/08/11 09:59	1
Toluene-d8 (Surr)	111		72 - 127	11/08/11 04:08	11/08/11 09:59	1
4-Bromofluorobenzene (Surr)	101		63 - 120	11/08/11 04:08	11/08/11 09:59	1
Dibromofluoromethane (Surr)	84		68 - 121	11/08/11 04:08	11/08/11 09:59	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.44	0.034	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Acenaphthene	0.034	J	0.089	0.0085	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Acetophenone	ND		0.44	0.036	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Acenaphthylene	0.022	J	0.089	0.010	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Anthracene	0.084	J	0.089	0.0087	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzo[a]anthracene	0.38		0.089	0.011	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzo[a]pyrene	0.34		0.089	0.0089	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzo[b]fluoranthene	0.45		0.089	0.014	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzo[g,h,i]perylene	0.21		0.089	0.0088	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzo[k]fluoranthene	0.24		0.089	0.018	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Bis(2-chloroethyl)ether	ND		0.089	0.012	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Bis(2-chloroethoxy)methane	ND		0.44	0.029	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2,2'-oxybis[1-chloropropane]	ND		0.089	0.0096	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Bis(2-ethylhexyl) phthalate	0.080	J	0.89	0.072	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
4-Bromophenyl phenyl ether	ND		0.44	0.039	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Butyl benzyl phthalate	ND		0.44	0.061	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Carbazole	0.046	J	0.089	0.0082	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
4-Chloroaniline	ND		0.44	0.036	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2-Chloronaphthalene	ND		0.089	0.0093	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
4-Chlorophenyl phenyl ether	ND		0.44	0.049	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Chrysene	0.37		0.089	0.011	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Dibenz(a,h)anthracene	0.071	J	0.089	0.0099	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Di-n-butyl phthalate	ND		0.44	0.056	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
3,3'-Dichlorobenzidine	ND		0.44	0.047	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Diethyl phthalate	ND		0.44	0.048	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (6')-11/2/11

Lab Sample ID: 180-5526-1

Date Collected: 11/02/11 08:20

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 74.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		0.44	0.048	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2,4-Dinitrotoluene	ND		0.44	0.036	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2,6-Dinitrotoluene	ND		0.44	0.046	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Di-n-octyl phthalate	ND		0.44	0.047	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Fluoranthene	0.72		0.089	0.0095	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Fluorene	0.023	J	0.089	0.012	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Hexachlorobenzene	ND		0.089	0.0095	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
3,3'-Dimethylbenzidine	ND		2.3	0.024	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Hexachlorobutadiene	ND		0.089	0.0099	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Hexachlorocyclopentadiene	ND		0.44	0.048	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Hexachloroethane	ND		0.44	0.032	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Indeno[1,2,3-cd]pyrene	0.18		0.089	0.0091	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Isophorone	ND		0.44	0.033	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2-Methylnaphthalene	0.069	J	0.089	0.0080	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Naphthalene	0.073	J	0.089	0.0076	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2-Nitroaniline	ND		2.3	0.20	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
3-Nitroaniline	ND		2.3	0.18	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
4-Nitroaniline	ND		2.3	0.18	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Nitrobenzene	ND		0.89	0.037	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
N-Nitrosodi-n-propylamine	ND		0.089	0.010	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
N-Nitrosodiphenylamine	ND		0.44	0.041	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Phenanthrene	0.38		0.089	0.014	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Pyrene	0.51		0.089	0.0090	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
4-Chloro-3-methylphenol	ND		0.44	0.041	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2-Chlorophenol	ND		0.44	0.036	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Aniline	ND		0.44	0.035	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2-Methylphenol	ND		0.44	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Methylphenol, 3 & 4	ND		0.44	0.043	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2,4-Dichlorophenol	ND		0.089	0.0089	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2,4-Dimethylphenol	ND		0.44	0.069	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2,4-Dinitrophenol	ND		2.3	0.53	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
4,6-Dinitro-2-methylphenol	ND		2.3	0.18	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2-Nitrophenol	ND		0.44	0.049	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzyl alcohol	ND		0.44	0.054	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
4-Nitrophenol	ND		2.3	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Pentachlorophenol	ND		0.44	0.040	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Phenol	ND		0.089	0.010	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2,4,5-Trichlorophenol	ND		0.44	0.047	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
2,4,6-Trichlorophenol	ND		0.44	0.066	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
1,1'-Biphenyl	ND		0.44	0.040	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Caprolactam	ND		2.3	0.33	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzaldehyde	ND		0.44	0.067	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Atrazine	ND *		0.44	0.043	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzoic acid	ND		2.3	0.18	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
Benzidine	ND		8.9	1.9	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
1,4-Dioxane	ND		0.89	0.051	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.44	0.057	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1
o-Toluidine	ND		0.44	0.033	mg/Kg	☼	11/07/11 04:22	11/09/11 00:12	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (6')-11/2/11

Lab Sample ID: 180-5526-1

Date Collected: 11/02/11 08:20

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 74.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		25 - 104	11/07/11 04:22	11/09/11 00:12	1
2-Fluorobiphenyl	64		35 - 105	11/07/11 04:22	11/09/11 00:12	1
Terphenyl-d14	66		25 - 127	11/07/11 04:22	11/09/11 00:12	1
Phenol-d5	50		25 - 105	11/07/11 04:22	11/09/11 00:12	1
2-Fluorophenol	12	X	39 - 103	11/07/11 04:22	11/09/11 00:12	1
2,4,6-Tribromophenol	1	X	35 - 124	11/07/11 04:22	11/09/11 00:12	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.44	0.034	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Acenaphthene	0.035	J	0.090	0.0086	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Acetophenone	ND		0.44	0.037	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Acenaphthylene	ND		0.090	0.010	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Anthracene	0.087	J	0.090	0.0087	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzo[a]anthracene	0.35		0.090	0.011	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzo[a]pyrene	0.26		0.090	0.0089	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzo[b]fluoranthene	0.48		0.090	0.014	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzo[g,h,i]perylene	0.17		0.090	0.0089	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzo[k]fluoranthene	ND		0.090	0.018	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Bis(2-chloroethyl)ether	ND		0.090	0.012	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Bis(2-chloroethoxy)methane	ND		0.44	0.029	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2,2'-oxybis[1-chloropropane]	ND		0.090	0.0096	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Bis(2-ethylhexyl) phthalate	ND		0.90	0.072	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
4-Bromophenyl phenyl ether	ND		0.44	0.039	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Butyl benzyl phthalate	ND		0.44	0.061	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Carbazole	0.035	J	0.090	0.0082	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
4-Chloroaniline	ND		0.44	0.036	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2-Chloronaphthalene	ND		0.090	0.0093	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
4-Chlorophenyl phenyl ether	ND		0.44	0.050	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Chrysene	0.28		0.090	0.011	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Dibenz(a,h)anthracene	0.034	J	0.090	0.0099	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Di-n-butyl phthalate	ND		0.44	0.056	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
3,3'-Dichlorobenzidine	ND		0.44	0.047	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Diethyl phthalate	ND		0.44	0.049	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Dimethyl phthalate	ND		0.44	0.049	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2,4-Dinitrotoluene	ND		0.44	0.036	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2,6-Dinitrotoluene	ND		0.44	0.046	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Di-n-octyl phthalate	ND		0.44	0.047	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Fluoranthene	0.55		0.090	0.0096	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Fluorene	0.019	J	0.090	0.012	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Hexachlorobenzene	ND		0.090	0.0095	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Hexachlorobutadiene	ND		0.090	0.010	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Hexachlorocyclopentadiene	ND		0.44	0.048	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Hexachloroethane	ND		0.44	0.032	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Indeno[1,2,3-cd]pyrene	0.15		0.090	0.0092	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Isophorone	ND		0.44	0.034	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2-Methylnaphthalene	0.030	J	0.090	0.0080	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Naphthalene	0.046	J	0.090	0.0077	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2-Nitroaniline	ND		2.3	0.20	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
3-Nitroaniline	ND		2.3	0.18	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
4-Nitroaniline	ND		2.3	0.18	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (6')-11/2/11

Lab Sample ID: 180-5526-1

Date Collected: 11/02/11 08:20

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 74.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		0.90	0.037	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
N-Nitrosodi-n-propylamine	ND		0.090	0.010	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
N-Nitrosodiphenylamine	ND		0.44	0.041	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Phenanthrene	0.42		0.090	0.014	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Pyrene	0.50		0.090	0.0090	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
4-Chloro-3-methylphenol	ND		0.44	0.041	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2-Chlorophenol	ND		0.44	0.037	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Aniline	ND		0.44	0.035	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2-Methylphenol	ND		0.44	0.031	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Methylphenol, 3 & 4	ND		0.44	0.044	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2,4-Dichlorophenol	ND		0.090	0.0090	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2,4-Dimethylphenol	ND		0.44	0.070	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2,4-Dinitrophenol	ND		2.3	0.53	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
4,6-Dinitro-2-methylphenol	ND		2.3	0.18	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2-Nitrophenol	ND		0.44	0.049	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzyl alcohol	ND		0.44	0.054	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
4-Nitrophenol	ND		2.3	0.16	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Pentachlorophenol	ND		0.44	0.040	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Phenol	ND		0.090	0.011	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2,4,5-Trichlorophenol	ND		0.44	0.048	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
2,4,6-Trichlorophenol	ND		0.44	0.067	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
1,1'-Biphenyl	ND		0.44	0.040	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Caprolactam	ND		2.3	0.34	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzaldehyde	ND		0.44	0.067	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Atrazine	ND		0.44	0.043	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzoic acid	ND		2.3	0.19	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
Benzidine	ND		9.0	1.9	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
1,4-Dioxane	ND		0.90	0.051	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.44	0.057	mg/Kg	☼	11/11/11 03:04	11/11/11 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	61		25 - 104	11/11/11 03:04	11/11/11 18:00	1
2-Fluorobiphenyl	64		35 - 105	11/11/11 03:04	11/11/11 18:00	1
Terphenyl-d14	74		25 - 127	11/11/11 03:04	11/11/11 18:00	1
Phenol-d5	49		25 - 105	11/11/11 03:04	11/11/11 18:00	1
2-Fluorophenol	13	X	39 - 103	11/11/11 03:04	11/11/11 18:00	1
2,4,6-Tribromophenol	2	X	35 - 124	11/11/11 03:04	11/11/11 18:00	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0023	0.00029	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
4,4'-DDE	ND		0.0023	0.00033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
4,4'-DDT	ND		0.0023	0.00033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Aldrin	ND		0.0023	0.00040	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
alpha-BHC	ND		0.0023	0.00036	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
beta-BHC	ND		0.0023	0.00058	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
delta-BHC	ND		0.0023	0.00034	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Dieldrin	ND		0.0023	0.00037	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Endosulfan I	ND		0.0023	0.00042	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Endosulfan II	ND		0.0023	0.00039	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (6')-11/2/11

Lab Sample ID: 180-5526-1

Date Collected: 11/02/11 08:20

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 74.7

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	ND		0.0023	0.00023	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Endrin	ND		0.0023	0.00043	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Diallate	ND		0.044	0.0037	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
gamma-BHC (Lindane)	0.00064	J p	0.0023	0.00039	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
gamma-Chlordane	ND		0.0023	0.00044	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Heptachlor	ND		0.0023	0.00049	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Heptachlor epoxide	ND		0.0023	0.00043	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Methoxychlor	ND		0.0044	0.00046	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Toxaphene	ND		0.089	0.015	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1
Chlordane (technical)	ND		0.023	0.00098	mg/Kg	☼	11/07/11 04:27	11/11/11 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		45 - 130	11/07/11 04:27	11/11/11 17:02	1
Tetrachloro-m-xylene	76		45 - 130	11/07/11 04:27	11/11/11 17:02	1
DCB Decachlorobiphenyl (Surr)	79		45 - 130	11/07/11 04:27	11/11/11 17:02	1
DCB Decachlorobiphenyl (Surr)	77		45 - 130	11/07/11 04:27	11/11/11 17:02	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.022	0.0033	mg/Kg	☼	11/07/11 04:27	11/11/11 15:59	1
PCB-1221	ND		0.022	0.0042	mg/Kg	☼	11/07/11 04:27	11/11/11 15:59	1
PCB-1232	ND		0.022	0.0038	mg/Kg	☼	11/07/11 04:27	11/11/11 15:59	1
PCB-1242	ND		0.022	0.0036	mg/Kg	☼	11/07/11 04:27	11/11/11 15:59	1
PCB-1248	ND		0.022	0.0021	mg/Kg	☼	11/07/11 04:27	11/11/11 15:59	1
PCB-1254	ND		0.022	0.0032	mg/Kg	☼	11/07/11 04:27	11/11/11 15:59	1
PCB-1260	ND		0.022	0.0032	mg/Kg	☼	11/07/11 04:27	11/11/11 15:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		35 - 140	11/07/11 04:27	11/11/11 15:59	1
DCB Decachlorobiphenyl (Surr)	85		35 - 140	11/07/11 04:27	11/11/11 15:59	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.11	0.0073	mg/Kg	☼	11/11/11 03:12	11/18/11 13:31	20
2,4,5-T	ND		0.027	0.0034	mg/Kg	☼	11/11/11 03:12	11/18/11 13:56	20
Silvex (2,4,5-TP)	ND		0.027	0.0028	mg/Kg	☼	11/11/11 03:12	11/18/11 13:56	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	45		42 - 140	11/11/11 03:12	11/18/11 13:31	20
2,4-Dichlorophenylacetic acid	44		42 - 140	11/11/11 03:12	11/18/11 13:56	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3	0.22	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Arsenic	3.6		1.3	0.29	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Barium	1500	B	130	0.33	mg/Kg	☼	11/14/11 10:12	11/16/11 11:46	5
Boron	59		26	0.34	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Beryllium	3.1	B	0.53	0.020	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Cadmium	0.046	J	0.66	0.032	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Chromium	10		3.3	0.56	mg/Kg	☼	11/14/11 10:12	11/16/11 11:46	5
Cobalt	0.77	J	6.6	0.12	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Copper	8.5		3.3	0.45	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (6')-11/2/11

Lab Sample ID: 180-5526-1

Date Collected: 11/02/11 08:20

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 74.7

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28		0.39	0.19	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Manganese	6600	B	9.8	0.32	mg/Kg	☼	11/14/11 10:12	11/16/11 11:46	5
Nickel	4.3	J	5.3	0.50	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Selenium	ND		3.3	1.4	mg/Kg	☼	11/14/11 10:12	11/16/11 11:46	5
Silver	ND		3.3	0.38	mg/Kg	☼	11/14/11 10:12	11/16/11 11:46	5
Thallium	ND		6.6	1.4	mg/Kg	☼	11/14/11 10:12	11/16/11 11:46	5
Vanadium	6.8		6.6	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Zinc	17	B	2.6	0.29	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1
Tin	2.8	J	13	0.70	mg/Kg	☼	11/14/11 10:12	11/15/11 17:33	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.044	0.015	mg/Kg	☼	11/14/11 03:33	11/14/11 09:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	10		0.013	0.0021	mg/Kg			11/29/11 12:19	1
Cr (VI)	0.14	J	0.53	0.13	mg/Kg	☼	11/18/11 10:00	11/22/11 15:11	1
Percent Moisture	25		0.10	0.10	%			11/03/11 16:10	1
Cyanide, Total	29		3.5	0.70	mg/Kg	☼	11/08/11 14:34	11/09/11 15:16	5
Cyanide, Weak Acid Dissociable	ND		0.67	0.21	mg/Kg	☼	11/16/11 11:49	11/16/11 15:08	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.54	0.13	mg/Kg	☼	11/22/11 13:00	11/23/11 10:11	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72	B	25	5.5	mg/Kg			11/08/11 17:25	2.5
Nitrate as N	4.0		1.2	0.37	mg/Kg			11/08/11 17:25	2.5
Nitrite as N	1.6		1.2	0.40	mg/Kg			11/08/11 17:25	2.5
Sulfate	110	B	25	2.9	mg/Kg			11/08/11 17:25	2.5

Client Sample ID: B-2 (16')-11/2/11

Lab Sample ID: 180-5526-2

Date Collected: 11/02/11 08:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	11	J *	31	7.8	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Benzene	1.5	J	7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Bromodichloromethane	ND		7.8	0.88	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Bromoform	ND		7.8	0.69	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Bromomethane	ND		7.8	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
2-Butanone (MEK)	ND		7.8	1.4	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Carbon disulfide	ND		7.8	0.80	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Carbon tetrachloride	ND		7.8	0.70	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Chlorobenzene	ND		7.8	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Chloroethane	ND		7.8	2.4	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Chloroform	ND		7.8	0.92	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (16')-11/2/11

Lab Sample ID: 180-5526-2

Date Collected: 11/02/11 08:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		7.8	1.3	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Dibromochloromethane	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,1-Dichloroethane	ND		7.8	0.90	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,2-Dichloroethane	ND		7.8	0.96	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,1-Dichloroethene	ND		7.8	1.3	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Acetonitrile	ND		160	36	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,2-Dichloropropane	ND		7.8	0.85	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
cis-1,3-Dichloropropene	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
trans-1,3-Dichloropropene	ND		7.8	0.94	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Ethylbenzene	ND		7.8	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
2-Hexanone	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Methylene Chloride	4.5	J B	7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
4-Methyl-2-pentanone (MIBK)	ND		7.8	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Bromochloromethane	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Styrene	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,1,2,2-Tetrachloroethane	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Tetrachloroethene	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,1,1-Trichloroethane	ND		7.8	0.76	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,1,2-Trichloroethane	ND		7.8	1.3	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Trichloroethene	ND		7.8	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Vinyl chloride	ND		7.8	0.73	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Xylenes, Total	ND		23	3.5	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Cyclohexane	ND		7.8	0.58	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,2-Dibromo-3-Chloropropane	ND		7.8	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,2-Dibromoethane (EDB)	ND		7.8	1.4	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Dichlorodifluoromethane	ND		7.8	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
cis-1,2-Dichloroethene	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
trans-1,2-Dichloroethene	ND		7.8	0.93	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Isopropylbenzene	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Methyl acetate	ND		7.8	1.4	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Methylcyclohexane	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Methyl tert-butyl ether	ND		7.8	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Trichlorofluoromethane	ND		7.8	1.4	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.8	1.7	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,2-Dichlorobenzene	ND		7.8	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,3-Dichlorobenzene	ND		7.8	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,4-Dichlorobenzene	ND		7.8	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,2,4-Trichlorobenzene	ND		7.8	1.4	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Toluene	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
N-Propylbenzene	ND		7.8	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,2,3-Trichloropropane	ND		7.8	1.5	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,3,5-Trimethylbenzene	ND		7.8	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
tert-Butylbenzene	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
1,2,4-Trimethylbenzene	14		7.8	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
sec-Butylbenzene	ND		7.8	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
n-Butylbenzene	ND		7.8	1.3	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Hexachlorobutadiene	ND		7.8	1.8	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Naphthalene	120	B	7.8	1.6	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Acrolein	ND		160	11	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Acrylonitrile	ND		160	16	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (16')-11/2/11

Lab Sample ID: 180-5526-2

Date Collected: 11/02/11 08:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methacrylonitrile	ND		7.8	0.46	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Isobutyl alcohol	ND		310	41	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Methyl methacrylate	ND		7.8	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Ethyl methacrylate	ND		7.8	0.66	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Vinyl acetate	ND		7.8	0.55	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1
Hexane	ND		7.8	1.6	ug/Kg	☼	11/08/11 04:08	11/08/11 10:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		52 - 124	11/08/11 04:08	11/08/11 10:44	1
Toluene-d8 (Surr)	103		72 - 127	11/08/11 04:08	11/08/11 10:44	1
4-Bromofluorobenzene (Surr)	96		63 - 120	11/08/11 04:08	11/08/11 10:44	1
Dibromofluoromethane (Surr)	86		68 - 121	11/08/11 04:08	11/08/11 10:44	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.40	0.030	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Acenaphthene	ND		0.080	0.0077	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Acetophenone	0.057	J	0.40	0.033	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Acenaphthylene	ND		0.080	0.0092	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Anthracene	ND		0.080	0.0078	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzo[a]anthracene	ND		0.080	0.010	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzo[a]pyrene	ND		0.080	0.0080	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzo[b]fluoranthene	ND		0.080	0.013	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzo[g,h,i]perylene	ND		0.080	0.0080	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzo[k]fluoranthene	ND		0.080	0.016	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Bis(2-chloroethyl)ether	ND		0.080	0.011	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Bis(2-chloroethoxy)methane	ND		0.40	0.026	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2,2'-oxybis[1-chloropropane]	ND		0.080	0.0086	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Bis(2-ethylhexyl) phthalate	0.091	J	0.80	0.065	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
4-Bromophenyl phenyl ether	ND		0.40	0.035	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Butyl benzyl phthalate	ND		0.40	0.055	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Carbazole	ND		0.080	0.0074	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
4-Chloroaniline	ND		0.40	0.032	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2-Chloronaphthalene	ND		0.080	0.0084	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
4-Chlorophenyl phenyl ether	ND		0.40	0.044	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Chrysene	ND		0.080	0.0095	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Dibenz(a,h)anthracene	ND		0.080	0.0089	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Di-n-butyl phthalate	ND		0.40	0.050	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
3,3'-Dichlorobenzidine	ND		0.40	0.042	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Diethyl phthalate	ND		0.40	0.044	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Dimethyl phthalate	ND		0.40	0.044	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2,4-Dinitrotoluene	ND		0.40	0.032	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2,6-Dinitrotoluene	ND		0.40	0.041	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Di-n-octyl phthalate	ND		0.40	0.042	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Fluoranthene	0.021	J	0.080	0.0086	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Fluorene	ND		0.080	0.011	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Hexachlorobenzene	ND		0.080	0.0085	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
3,3'-Dimethylbenzidine	ND		2.0	0.021	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Hexachlorobutadiene	ND		0.080	0.0090	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Hexachlorocyclopentadiene	ND		0.40	0.043	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Hexachloroethane	ND		0.40	0.029	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (16')-11/2/11

Lab Sample ID: 180-5526-2

Date Collected: 11/02/11 08:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 82.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.080	0.0082	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Isophorone	ND		0.40	0.030	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2-Methylnaphthalene	0.020	J	0.080	0.0072	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Naphthalene	0.24		0.080	0.0069	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2-Nitroaniline	ND		2.0	0.18	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
3-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
4-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Nitrobenzene	ND		0.80	0.033	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
N-Nitrosodi-n-propylamine	ND		0.080	0.0094	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
N-Nitrosodiphenylamine	ND		0.40	0.037	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Phenanthrene	0.021	J	0.080	0.013	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Pyrene	0.021	J	0.080	0.0081	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
4-Chloro-3-methylphenol	ND		0.40	0.037	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2-Chlorophenol	ND		0.40	0.033	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Aniline	ND		0.40	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2-Methylphenol	ND		0.40	0.028	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Methylphenol, 3 & 4	ND		0.40	0.039	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2,4-Dichlorophenol	ND		0.080	0.0080	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2,4-Dimethylphenol	ND		0.40	0.063	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2,4-Dinitrophenol	ND		2.0	0.48	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
4,6-Dinitro-2-methylphenol	ND		2.0	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2-Nitrophenol	ND		0.40	0.044	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzyl alcohol	ND		0.40	0.048	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
4-Nitrophenol	ND		2.0	0.15	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Pentachlorophenol	ND		0.40	0.036	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Phenol	ND		0.080	0.0095	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2,4,5-Trichlorophenol	ND		0.40	0.043	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
2,4,6-Trichlorophenol	ND		0.40	0.060	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
1,1'-Biphenyl	ND		0.40	0.036	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Caprolactam	ND		2.0	0.30	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzaldehyde	ND		0.40	0.060	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Atrazine	ND *		0.40	0.039	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzoic acid	ND		2.0	0.17	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
Benzidine	ND		8.0	1.7	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
1,4-Dioxane	ND		0.80	0.046	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.40	0.051	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1
o-Toluidine	ND		0.40	0.030	mg/Kg	☼	11/07/11 04:22	11/09/11 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	74		25 - 104	11/07/11 04:22	11/09/11 00:32	1
2-Fluorobiphenyl	70		35 - 105	11/07/11 04:22	11/09/11 00:32	1
Terphenyl-d14	72		25 - 127	11/07/11 04:22	11/09/11 00:32	1
Phenol-d5	79		25 - 105	11/07/11 04:22	11/09/11 00:32	1
2-Fluorophenol	51		39 - 103	11/07/11 04:22	11/09/11 00:32	1
2,4,6-Tribromophenol	14	X	35 - 124	11/07/11 04:22	11/09/11 00:32	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.40	0.030	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Acenaphthene	ND		0.080	0.0077	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (16')-11/2/11

Lab Sample ID: 180-5526-2

Date Collected: 11/02/11 08:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 82.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	ND		0.40	0.033	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Acenaphthylene	ND		0.080	0.0092	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Anthracene	ND		0.080	0.0078	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzo[a]anthracene	ND		0.080	0.010	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzo[a]pyrene	ND		0.080	0.0080	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzo[b]fluoranthene	ND		0.080	0.013	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzo[g,h,i]perylene	ND		0.080	0.0080	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzo[k]fluoranthene	ND		0.080	0.016	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Bis(2-chloroethyl)ether	ND		0.080	0.011	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Bis(2-chloroethoxy)methane	ND		0.40	0.026	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2,2'-oxybis[1-chloropropane]	ND		0.080	0.0086	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Bis(2-ethylhexyl) phthalate	0.076	J	0.80	0.065	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
4-Bromophenyl phenyl ether	ND		0.40	0.035	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Butyl benzyl phthalate	ND		0.40	0.055	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Carbazole	ND		0.080	0.0074	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
4-Chloroaniline	ND		0.40	0.032	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2-Chloronaphthalene	ND		0.080	0.0084	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
4-Chlorophenyl phenyl ether	ND		0.40	0.044	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Chrysene	ND		0.080	0.0095	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Dibenz(a,h)anthracene	ND		0.080	0.0089	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Di-n-butyl phthalate	ND		0.40	0.050	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
3,3'-Dichlorobenzidine	ND		0.40	0.042	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Diethyl phthalate	0.12	J	0.40	0.044	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Dimethyl phthalate	ND		0.40	0.044	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2,4-Dinitrotoluene	ND		0.40	0.032	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2,6-Dinitrotoluene	ND		0.40	0.041	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Di-n-octyl phthalate	ND		0.40	0.042	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Fluoranthene	0.010	J	0.080	0.0086	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Fluorene	ND		0.080	0.011	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Hexachlorobenzene	ND		0.080	0.0085	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Hexachlorobutadiene	ND		0.080	0.0090	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Hexachlorocyclopentadiene	ND		0.40	0.043	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Hexachloroethane	ND		0.40	0.029	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Indeno[1,2,3-cd]pyrene	ND		0.080	0.0082	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Isophorone	ND		0.40	0.030	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2-Methylnaphthalene	0.016	J	0.080	0.0072	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Naphthalene	0.15		0.080	0.0069	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2-Nitroaniline	ND		2.0	0.18	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
3-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
4-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Nitrobenzene	ND		0.80	0.033	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
N-Nitrosodi-n-propylamine	ND		0.080	0.0094	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
N-Nitrosodiphenylamine	ND		0.40	0.037	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Phenanthrene	0.013	J	0.080	0.013	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Pyrene	0.012	J	0.080	0.0081	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
4-Chloro-3-methylphenol	ND		0.40	0.037	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2-Chlorophenol	ND		0.40	0.033	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Aniline	ND		0.40	0.031	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2-Methylphenol	ND		0.40	0.028	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Methylphenol, 3 & 4	ND		0.40	0.039	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (16')-11/2/11

Lab Sample ID: 180-5526-2

Date Collected: 11/02/11 08:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 82.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		0.080	0.0080	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2,4-Dimethylphenol	ND		0.40	0.063	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2,4-Dinitrophenol	ND		2.0	0.48	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
4,6-Dinitro-2-methylphenol	ND		2.0	0.16	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2-Nitrophenol	ND		0.40	0.044	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzyl alcohol	ND		0.40	0.048	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
4-Nitrophenol	ND		2.0	0.15	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Pentachlorophenol	ND		0.40	0.036	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Phenol	ND		0.080	0.0095	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2,4,5-Trichlorophenol	ND		0.40	0.043	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
2,4,6-Trichlorophenol	ND		0.40	0.060	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
1,1'-Biphenyl	ND		0.40	0.036	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Caprolactam	ND		2.0	0.30	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzaldehyde	ND		0.40	0.060	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Atrazine	ND		0.40	0.039	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzoic acid	ND		2.0	0.17	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
Benzidine	ND		8.0	1.7	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
1,4-Dioxane	ND		0.80	0.046	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.40	0.051	mg/Kg	☼	11/11/11 03:04	11/11/11 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	69		25 - 104	11/11/11 03:04	11/11/11 18:22	1
2-Fluorobiphenyl	67		35 - 105	11/11/11 03:04	11/11/11 18:22	1
Terphenyl-d14	71		25 - 127	11/11/11 03:04	11/11/11 18:22	1
Phenol-d5	71		25 - 105	11/11/11 03:04	11/11/11 18:22	1
2-Fluorophenol	49		39 - 103	11/11/11 03:04	11/11/11 18:22	1
2,4,6-Tribromophenol	9	X	35 - 124	11/11/11 03:04	11/11/11 18:22	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0020	0.00026	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
4,4'-DDE	ND		0.0020	0.00030	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
4,4'-DDT	ND		0.0020	0.00030	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Aldrin	ND		0.0020	0.00036	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
alpha-BHC	ND		0.0020	0.00032	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
beta-BHC	ND		0.0020	0.00052	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
delta-BHC	ND		0.0020	0.00030	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Dieldrin	ND		0.0020	0.00033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Endosulfan I	ND		0.0020	0.00037	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Endosulfan II	ND		0.0020	0.00035	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Endosulfan sulfate	ND		0.0020	0.00021	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Endrin	ND		0.0020	0.00039	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Diallate	ND		0.039	0.0033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
gamma-BHC (Lindane)	0.00056	J p	0.0020	0.00035	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
gamma-Chlordane	ND		0.0020	0.00039	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Heptachlor	ND		0.0020	0.00044	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Heptachlor epoxide	ND		0.0020	0.00039	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Methoxychlor	ND		0.0039	0.00041	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Toxaphene	ND		0.080	0.013	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1
Chlordane (technical)	ND		0.020	0.00088	mg/Kg	☼	11/07/11 04:27	11/11/11 17:21	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (16')-11/2/11

Lab Sample ID: 180-5526-2

Date Collected: 11/02/11 08:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 82.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		45 - 130	11/07/11 04:27	11/11/11 17:21	1
Tetrachloro-m-xylene	74		45 - 130	11/07/11 04:27	11/11/11 17:21	1
DCB Decachlorobiphenyl (Surr)	67		45 - 130	11/07/11 04:27	11/11/11 17:21	1
DCB Decachlorobiphenyl (Surr)	66		45 - 130	11/07/11 04:27	11/11/11 17:21	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0030	mg/Kg	☼	11/07/11 04:27	11/11/11 16:29	1
PCB-1221	ND		0.020	0.0038	mg/Kg	☼	11/07/11 04:27	11/11/11 16:29	1
PCB-1232	ND		0.020	0.0034	mg/Kg	☼	11/07/11 04:27	11/11/11 16:29	1
PCB-1242	ND		0.020	0.0032	mg/Kg	☼	11/07/11 04:27	11/11/11 16:29	1
PCB-1248	ND		0.020	0.0019	mg/Kg	☼	11/07/11 04:27	11/11/11 16:29	1
PCB-1254	ND		0.020	0.0028	mg/Kg	☼	11/07/11 04:27	11/11/11 16:29	1
PCB-1260	ND		0.020	0.0028	mg/Kg	☼	11/07/11 04:27	11/11/11 16:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		35 - 140				11/07/11 04:27	11/11/11 16:29	1
DCB Decachlorobiphenyl (Surr)	77		35 - 140				11/07/11 04:27	11/11/11 16:29	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.097	0.0066	mg/Kg	☼	11/11/11 03:12	11/18/11 14:21	20
2,4,5-T	ND		0.024	0.0030	mg/Kg	☼	11/11/11 03:12	11/18/11 14:21	20
Silvex (2,4,5-TP)	ND		0.024	0.0025	mg/Kg	☼	11/11/11 03:12	11/18/11 14:21	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	58		42 - 140				11/11/11 03:12	11/18/11 13:56	20
2,4-Dichlorophenylacetic acid	61		42 - 140				11/11/11 03:12	11/18/11 14:21	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.2	0.19	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Arsenic	2.8		1.2	0.26	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Barium	360	B	23	0.058	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Boron	87		23	0.30	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Beryllium	4.7	B	0.46	0.017	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Cadmium	0.051	J	0.58	0.028	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Chromium	4.8		0.58	0.098	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Cobalt	0.55	J	5.8	0.10	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Copper	5.1		2.9	0.39	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Lead	1.2		0.35	0.17	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Manganese	2000	B	1.7	0.055	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Nickel	1.8	J	4.6	0.44	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Selenium	1.7		0.58	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Silver	ND		0.58	0.067	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Thallium	ND		1.2	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Vanadium	5.6	J	5.8	0.21	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Zinc	6.7	B	2.3	0.26	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1
Tin	1.2	J	12	0.62	mg/Kg	☼	11/14/11 10:12	11/15/11 17:39	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2 (16')-11/2/11

Lab Sample ID: 180-5526-2

Date Collected: 11/02/11 08:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 82.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.040	0.013	mg/Kg	☼	11/14/11 03:33	11/14/11 09:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	4.8		0.013	0.0021	mg/Kg			11/29/11 12:19	1
Cr (VI)	ND		0.48	0.12	mg/Kg	☼	11/18/11 10:00	11/22/11 15:12	1
Percent Moisture	17		0.10	0.10	%			11/03/11 16:10	1
Cyanide, Total	2.2		0.63	0.13	mg/Kg	☼	11/08/11 14:34	11/09/11 15:03	1
Cyanide, Weak Acid Dissociable	ND		0.61	0.20	mg/Kg	☼	11/16/11 11:49	11/16/11 15:08	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.48	0.12	mg/Kg	☼	11/22/11 13:00	11/23/11 10:12	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24	B	9.8	2.2	mg/Kg			11/08/11 17:53	1
Nitrate as N	0.73		0.49	0.15	mg/Kg			11/08/11 17:53	1
Nitrite as N	0.46	J	0.49	0.16	mg/Kg			11/08/11 17:53	1
Sulfate	2200	B	98	12	mg/Kg			11/08/11 18:07	10

Client Sample ID: B-1 (6')-11/3/11

Lab Sample ID: 180-5526-3

Date Collected: 11/03/11 09:00

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 88.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	7.6	J *	22	5.4	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Benzene	ND		5.4	0.73	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Bromodichloromethane	ND		5.4	0.61	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Bromoform	ND		5.4	0.48	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Bromomethane	ND		5.4	0.80	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
2-Butanone (MEK)	ND		5.4	0.95	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Carbon disulfide	8.8		5.4	0.55	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Carbon tetrachloride	ND		5.4	0.48	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Chlorobenzene	ND		5.4	0.82	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Chloroethane	ND		5.4	1.7	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Chloroform	ND		5.4	0.63	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Chloromethane	ND		5.4	0.92	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Dibromochloromethane	ND		5.4	0.77	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,1-Dichloroethane	ND		5.4	0.62	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,2-Dichloroethane	ND		5.4	0.66	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,1-Dichloroethene	ND		5.4	0.92	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Acetonitrile	ND		110	25	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,2-Dichloropropane	ND		5.4	0.59	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
cis-1,3-Dichloropropene	ND		5.4	0.73	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
trans-1,3-Dichloropropene	ND		5.4	0.65	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Ethylbenzene	ND		5.4	0.70	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
2-Hexanone	ND		5.4	0.75	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Methylene Chloride	2.4	J B	5.4	0.73	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (6')-11/3/11

Lab Sample ID: 180-5526-3

Date Collected: 11/03/11 09:00

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 88.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.4	0.71	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Bromochloromethane	ND		5.4	0.75	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Styrene	ND		5.4	0.76	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,1,2,2-Tetrachloroethane	ND		5.4	0.78	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Tetrachloroethene	ND		5.4	0.74	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,1,1-Trichloroethane	ND		5.4	0.53	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,1,2-Trichloroethane	ND		5.4	0.90	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Trichloroethene	ND		5.4	0.71	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Vinyl chloride	ND		5.4	0.51	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Xylenes, Total	ND		16	2.4	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Cyclohexane	ND		5.4	0.40	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,2-Dibromo-3-Chloropropane	ND		5.4	0.81	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,2-Dibromoethane (EDB)	ND		5.4	0.93	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Dichlorodifluoromethane	ND		5.4	0.72	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
cis-1,2-Dichloroethene	ND		5.4	0.76	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
trans-1,2-Dichloroethene	ND		5.4	0.65	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Isopropylbenzene	ND		5.4	0.74	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Methyl acetate	ND		5.4	0.98	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Methylcyclohexane	ND		5.4	0.79	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Methyl tert-butyl ether	ND		5.4	0.81	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Trichlorofluoromethane	ND		5.4	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,2-Dichlorobenzene	ND		5.4	0.86	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,3-Dichlorobenzene	ND		5.4	0.71	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,4-Dichlorobenzene	ND		5.4	0.69	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,2,4-Trichlorobenzene	ND		5.4	0.96	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Toluene	ND		5.4	0.79	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
N-Propylbenzene	ND		5.4	0.83	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,2,3-Trichloropropane	ND		5.4	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,3,5-Trimethylbenzene	ND		5.4	0.72	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
tert-Butylbenzene	ND		5.4	0.76	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
1,2,4-Trimethylbenzene	ND		5.4	0.70	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
sec-Butylbenzene	ND		5.4	0.85	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
n-Butylbenzene	ND		5.4	0.87	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Hexachlorobutadiene	ND		5.4	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Naphthalene	19 B		5.4	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Acrolein	ND		110	7.6	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Acrylonitrile	ND		110	11	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Methacrylonitrile	ND		5.4	0.32	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Isobutyl alcohol	ND		220	28	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Methyl methacrylate	ND		5.4	0.74	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Ethyl methacrylate	ND		5.4	0.46	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Vinyl acetate	ND		5.4	0.38	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1
Hexane	ND		5.4	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 11:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		52 - 124	11/08/11 04:08	11/08/11 11:28	1
Toluene-d8 (Surr)	103		72 - 127	11/08/11 04:08	11/08/11 11:28	1
4-Bromofluorobenzene (Surr)	97		63 - 120	11/08/11 04:08	11/08/11 11:28	1
Dibromofluoromethane (Surr)	85		68 - 121	11/08/11 04:08	11/08/11 11:28	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (6')-11/3/11

Lab Sample ID: 180-5526-3

Date Collected: 11/03/11 09:00

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 88.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.37	0.029	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Acenaphthene	0.0081	J	0.076	0.0073	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Acetophenone	ND		0.37	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Acenaphthylene	ND		0.076	0.0087	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Anthracene	0.013	J	0.076	0.0074	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzo[a]anthracene	0.029	J	0.076	0.0095	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzo[a]pyrene	0.032	J	0.076	0.0076	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzo[b]fluoranthene	0.038	J	0.076	0.012	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzo[g,h,i]perylene	ND		0.076	0.0075	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzo[k]fluoranthene	ND		0.076	0.015	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Bis(2-chloroethyl)ether	ND		0.076	0.010	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Bis(2-chloroethoxy)methane	ND		0.37	0.025	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2,2'-oxybis[1-chloropropane]	ND		0.076	0.0082	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Bis(2-ethylhexyl) phthalate	ND		0.76	0.061	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
4-Bromophenyl phenyl ether	ND		0.37	0.033	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Butyl benzyl phthalate	ND		0.37	0.052	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Carbazole	ND		0.076	0.0070	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
4-Chloroaniline	ND		0.37	0.030	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2-Chloronaphthalene	ND		0.076	0.0079	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
4-Chlorophenyl phenyl ether	ND		0.37	0.042	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Chrysene	0.030	J	0.076	0.0090	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Dibenz(a,h)anthracene	ND		0.076	0.0084	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Di-n-butyl phthalate	ND		0.37	0.047	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
3,3'-Dichlorobenzidine	ND		0.37	0.040	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Diethyl phthalate	ND		0.37	0.041	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Dimethyl phthalate	ND		0.37	0.041	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2,4-Dinitrotoluene	ND		0.37	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2,6-Dinitrotoluene	ND		0.37	0.039	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Di-n-octyl phthalate	ND		0.37	0.040	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Fluoranthene	0.061	J	0.076	0.0081	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Fluorene	0.019	J	0.076	0.010	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Hexachlorobenzene	ND		0.076	0.0081	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
3,3'-Dimethylbenzidine	ND		1.9	0.020	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Hexachlorobutadiene	ND		0.076	0.0085	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Hexachlorocyclopentadiene	ND		0.37	0.041	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Hexachloroethane	ND		0.37	0.027	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Indeno[1,2,3-cd]pyrene	ND		0.076	0.0078	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Isophorone	ND		0.37	0.029	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2-Methylnaphthalene	0.014	J	0.076	0.0068	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Naphthalene	ND		0.076	0.0065	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2-Nitroaniline	ND		1.9	0.17	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
3-Nitroaniline	ND		1.9	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
4-Nitroaniline	ND		1.9	0.15	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Nitrobenzene	ND		0.76	0.032	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
N-Nitrosodi-n-propylamine	ND		0.076	0.0089	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
N-Nitrosodiphenylamine	ND		0.37	0.035	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Phenanthrene	0.064	J	0.076	0.012	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Pyrene	0.048	J	0.076	0.0077	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
4-Chloro-3-methylphenol	ND		0.37	0.035	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2-Chlorophenol	ND		0.37	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (6')-11/3/11

Lab Sample ID: 180-5526-3

Date Collected: 11/03/11 09:00

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 88.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		0.37	0.029	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2-Methylphenol	ND		0.37	0.026	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Methylphenol, 3 & 4	ND		0.37	0.037	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2,4-Dichlorophenol	ND		0.076	0.0076	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2,4-Dimethylphenol	ND		0.37	0.059	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2,4-Dinitrophenol	ND		1.9	0.45	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
4,6-Dinitro-2-methylphenol	ND		1.9	0.15	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2-Nitrophenol	ND		0.37	0.042	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzyl alcohol	ND		0.37	0.046	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
4-Nitrophenol	ND		1.9	0.14	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Pentachlorophenol	ND		0.37	0.034	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Phenol	ND		0.076	0.0089	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2,4,5-Trichlorophenol	ND		0.37	0.040	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
2,4,6-Trichlorophenol	ND		0.37	0.057	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
1,1'-Biphenyl	ND		0.37	0.034	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Caprolactam	ND		1.9	0.29	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzaldehyde	ND		0.37	0.057	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Atrazine	ND *		0.37	0.037	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzoic acid	ND		1.9	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
Benzidine	ND		7.6	1.6	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
1,4-Dioxane	ND		0.76	0.043	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.37	0.048	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1
o-Toluidine	ND		0.37	0.028	mg/Kg	☼	11/07/11 04:22	11/09/11 00:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	78		25 - 104	11/07/11 04:22	11/09/11 00:51	1
2-Fluorobiphenyl	73		35 - 105	11/07/11 04:22	11/09/11 00:51	1
Terphenyl-d14	75		25 - 127	11/07/11 04:22	11/09/11 00:51	1
Phenol-d5	87		25 - 105	11/07/11 04:22	11/09/11 00:51	1
2-Fluorophenol	70		39 - 103	11/07/11 04:22	11/09/11 00:51	1
2,4,6-Tribromophenol	20	X	35 - 124	11/07/11 04:22	11/09/11 00:51	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.37	0.029	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Acenaphthene	0.011	J	0.076	0.0073	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Acetophenone	ND		0.37	0.031	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Acenaphthylene	ND		0.076	0.0087	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Anthracene	0.020	J	0.076	0.0074	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzo[a]anthracene	0.046	J	0.076	0.0095	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzo[a]pyrene	0.039	J	0.076	0.0076	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzo[b]fluoranthene	0.057	J	0.076	0.012	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzo[g,h,i]perylene	0.022	J	0.076	0.0075	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzo[k]fluoranthene	ND		0.076	0.015	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Bis(2-chloroethyl)ether	ND		0.076	0.010	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Bis(2-chloroethoxy)methane	ND		0.37	0.025	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2,2'-oxybis[1-chloropropane]	ND		0.076	0.0082	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Bis(2-ethylhexyl) phthalate	ND		0.76	0.061	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
4-Bromophenyl phenyl ether	ND		0.37	0.033	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Butyl benzyl phthalate	ND		0.37	0.052	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (6')-11/3/11

Lab Sample ID: 180-5526-3

Date Collected: 11/03/11 09:00

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 88.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.014	J	0.076	0.0070	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
4-Chloroaniline	ND		0.37	0.030	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2-Chloronaphthalene	ND		0.076	0.0079	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
4-Chlorophenyl phenyl ether	ND		0.37	0.042	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Chrysene	0.033	J	0.076	0.0090	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Dibenz(a,h)anthracene	ND		0.076	0.0084	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Di-n-butyl phthalate	ND		0.37	0.047	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
3,3'-Dichlorobenzidine	ND		0.37	0.040	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Diethyl phthalate	ND		0.37	0.041	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Dimethyl phthalate	ND		0.37	0.041	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2,4-Dinitrotoluene	ND		0.37	0.031	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2,6-Dinitrotoluene	ND		0.37	0.039	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Di-n-octyl phthalate	ND		0.37	0.040	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Fluoranthene	0.070	J	0.076	0.0081	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Fluorene	0.013	J	0.076	0.010	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Hexachlorobenzene	ND		0.076	0.0081	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Hexachlorobutadiene	ND		0.076	0.0085	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Hexachlorocyclopentadiene	ND		0.37	0.041	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Hexachloroethane	ND		0.37	0.027	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Indeno[1,2,3-cd]pyrene	0.019	J	0.076	0.0078	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Isophorone	ND		0.37	0.029	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2-Methylnaphthalene	0.011	J	0.076	0.0068	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Naphthalene	0.021	J	0.076	0.0065	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2-Nitroaniline	ND		1.9	0.17	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
3-Nitroaniline	ND		1.9	0.16	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
4-Nitroaniline	ND		1.9	0.15	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Nitrobenzene	ND		0.76	0.032	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
N-Nitrosodi-n-propylamine	ND		0.076	0.0089	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
N-Nitrosodiphenylamine	ND		0.37	0.035	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Phenanthrene	0.097		0.076	0.012	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Pyrene	0.072	J	0.076	0.0077	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
4-Chloro-3-methylphenol	ND		0.37	0.035	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2-Chlorophenol	ND		0.37	0.031	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Aniline	ND		0.37	0.029	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2-Methylphenol	ND		0.37	0.026	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Methylphenol, 3 & 4	ND		0.37	0.037	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2,4-Dichlorophenol	ND		0.076	0.0076	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2,4-Dimethylphenol	ND		0.37	0.059	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2,4-Dinitrophenol	ND		1.9	0.45	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
4,6-Dinitro-2-methylphenol	ND		1.9	0.15	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2-Nitrophenol	ND		0.37	0.042	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzyl alcohol	ND		0.37	0.046	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
4-Nitrophenol	ND		1.9	0.14	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Pentachlorophenol	ND		0.37	0.034	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Phenol	ND		0.076	0.0089	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2,4,5-Trichlorophenol	ND		0.37	0.040	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
2,4,6-Trichlorophenol	ND		0.37	0.057	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
1,1'-Biphenyl	ND		0.37	0.034	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Caprolactam	ND		1.9	0.29	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzaldehyde	ND		0.37	0.057	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (6')-11/3/11

Lab Sample ID: 180-5526-3

Date Collected: 11/03/11 09:00

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 88.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND		0.37	0.037	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzoic acid	ND		1.9	0.16	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
Benzidine	ND		7.6	1.6	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
1,4-Dioxane	ND		0.76	0.043	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.37	0.048	mg/Kg	☼	11/11/11 03:04	11/11/11 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	66		25 - 104	11/11/11 03:04	11/11/11 18:45	1
2-Fluorobiphenyl	68		35 - 105	11/11/11 03:04	11/11/11 18:45	1
Terphenyl-d14	76		25 - 127	11/11/11 03:04	11/11/11 18:45	1
Phenol-d5	76		25 - 105	11/11/11 03:04	11/11/11 18:45	1
2-Fluorophenol	69		39 - 103	11/11/11 03:04	11/11/11 18:45	1
2,4,6-Tribromophenol	23	X	35 - 124	11/11/11 03:04	11/11/11 18:45	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0019	0.00024	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
4,4'-DDE	ND		0.0019	0.00028	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
4,4'-DDT	ND		0.0019	0.00028	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Aldrin	ND		0.0019	0.00033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
alpha-BHC	ND		0.0019	0.00030	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
beta-BHC	ND		0.0019	0.00048	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
delta-BHC	ND		0.0019	0.00029	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Dieldrin	ND		0.0019	0.00031	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Endosulfan I	ND		0.0019	0.00035	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Endosulfan II	ND		0.0019	0.00033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Endosulfan sulfate	ND		0.0019	0.00019	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Endrin	ND		0.0019	0.00036	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Diallate	ND		0.037	0.0031	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
gamma-BHC (Lindane)	0.00091	J p	0.0019	0.00033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
gamma-Chlordane	ND		0.0019	0.00037	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Heptachlor	ND		0.0019	0.00042	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Heptachlor epoxide	ND		0.0019	0.00036	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Methoxychlor	ND		0.0037	0.00039	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Toxaphene	ND		0.075	0.012	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1
Chlordane (technical)	ND		0.019	0.00082	mg/Kg	☼	11/07/11 04:27	11/11/11 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		45 - 130	11/07/11 04:27	11/11/11 17:40	1
Tetrachloro-m-xylene	83		45 - 130	11/07/11 04:27	11/11/11 17:40	1
DCB Decachlorobiphenyl (Surr)	84		45 - 130	11/07/11 04:27	11/11/11 17:40	1
DCB Decachlorobiphenyl (Surr)	83		45 - 130	11/07/11 04:27	11/11/11 17:40	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0028	mg/Kg	☼	11/07/11 04:27	11/11/11 16:58	1
PCB-1221	ND		0.019	0.0036	mg/Kg	☼	11/07/11 04:27	11/11/11 16:58	1
PCB-1232	ND		0.019	0.0032	mg/Kg	☼	11/07/11 04:27	11/11/11 16:58	1
PCB-1242	ND		0.019	0.0030	mg/Kg	☼	11/07/11 04:27	11/11/11 16:58	1
PCB-1248	ND		0.019	0.0018	mg/Kg	☼	11/07/11 04:27	11/11/11 16:58	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (6')-11/3/11

Lab Sample ID: 180-5526-3

Date Collected: 11/03/11 09:00

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 88.1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		0.019	0.0027	mg/Kg	☼	11/07/11 04:27	11/11/11 16:58	1
PCB-1260	ND		0.019	0.0027	mg/Kg	☼	11/07/11 04:27	11/11/11 16:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		35 - 140				11/07/11 04:27	11/11/11 16:58	1
DCB Decachlorobiphenyl (Surr)	90		35 - 140				11/07/11 04:27	11/11/11 16:58	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.090	0.0062	mg/Kg	☼	11/11/11 03:12	11/18/11 14:45	20
2,4,5-T	ND		0.023	0.0028	mg/Kg	☼	11/11/11 03:12	11/18/11 14:45	20
Silvex (2,4,5-TP)	ND		0.023	0.0024	mg/Kg	☼	11/11/11 03:12	11/18/11 14:45	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	54		42 - 140				11/11/11 03:12	11/18/11 14:21	20
2,4-Dichlorophenylacetic acid	50		42 - 140				11/11/11 03:12	11/18/11 14:45	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.18	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Arsenic	1.0	J	1.1	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Barium	320	B	22	0.055	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Boron	110		22	0.28	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Beryllium	5.3	B	0.44	0.016	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Cadmium	ND		0.55	0.026	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Chromium	1.8		1.1	0.19	mg/Kg	☼	11/14/11 10:12	11/16/11 11:52	2
Cobalt	ND		5.5	0.097	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Copper	1.9	J	2.7	0.37	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Lead	0.25	J	0.33	0.16	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Manganese	3100	B	3.3	0.10	mg/Kg	☼	11/14/11 10:12	11/16/11 11:52	2
Nickel	ND		4.4	0.42	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Selenium	3.0		1.1	0.45	mg/Kg	☼	11/14/11 10:12	11/16/11 11:52	2
Silver	ND		1.1	0.13	mg/Kg	☼	11/14/11 10:12	11/16/11 11:52	2
Thallium	ND		2.2	0.45	mg/Kg	☼	11/14/11 10:12	11/16/11 11:52	2
Vanadium	2.8	J	5.5	0.20	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Zinc	1.6	J B	2.2	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1
Tin	1.0	J	11	0.59	mg/Kg	☼	11/14/11 10:12	11/15/11 17:45	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.035	0.012	mg/Kg	☼	11/15/11 03:50	11/15/11 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	1.8		0.013	0.0021	mg/Kg			11/29/11 12:19	1
Cr (VI)	ND		0.45	0.11	mg/Kg	☼	11/18/11 10:00	11/22/11 15:13	1
Percent Moisture	12		0.10	0.10	%			11/03/11 16:10	1
Cyanide, Total	0.23	J	0.59	0.12	mg/Kg	☼	11/08/11 14:34	11/09/11 15:03	1
Cyanide, Weak Acid Dissociable	ND		0.59	0.19	mg/Kg	☼	11/16/11 11:49	11/16/11 15:08	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (6')-11/3/11

Lab Sample ID: 180-5526-3

Date Collected: 11/03/11 09:00

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 88.1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.45	0.11	mg/Kg	☼	11/22/11 13:00	11/23/11 10:13	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21	B	10	2.2	mg/Kg			11/08/11 18:21	1
Nitrate as N	1.8		0.50	0.15	mg/Kg			11/08/11 18:21	1
Nitrite as N	1.1		0.50	0.16	mg/Kg			11/08/11 18:21	1
Sulfate	180	B	10	1.2	mg/Kg			11/08/11 18:21	1

Client Sample ID: B-1 (15')-11/3/11

Lab Sample ID: 180-5526-4

Date Collected: 11/03/11 09:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 86.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	24	6.1	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Benzene	ND		6.1	0.82	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Bromodichloromethane	ND		6.1	0.69	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Bromoform	ND		6.1	0.54	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Bromomethane	ND		6.1	0.90	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
2-Butanone (MEK)	ND		6.1	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Carbon disulfide	ND		6.1	0.63	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Carbon tetrachloride	ND		6.1	0.55	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Chlorobenzene	ND		6.1	0.93	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Chloroethane	ND		6.1	1.9	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Chloroform	ND		6.1	0.71	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Chloromethane	ND		6.1	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Dibromochloromethane	ND		6.1	0.87	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,1-Dichloroethane	ND		6.1	0.70	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,2-Dichloroethane	ND		6.1	0.75	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,1-Dichloroethene	ND		6.1	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Acetonitrile	ND		120	28	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,2-Dichloropropane	ND		6.1	0.66	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
cis-1,3-Dichloropropene	ND		6.1	0.83	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
trans-1,3-Dichloropropene	ND		6.1	0.73	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Ethylbenzene	ND		6.1	0.78	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
2-Hexanone	ND		6.1	0.84	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Methylene Chloride	3.8	J B	6.1	0.82	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
4-Methyl-2-pentanone (MIBK)	ND		6.1	0.80	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Bromochloromethane	ND		6.1	0.84	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Styrene	ND		6.1	0.86	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,1,2,2-Tetrachloroethane	ND		6.1	0.88	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Tetrachloroethene	ND		6.1	0.83	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,1,1-Trichloroethane	ND		6.1	0.59	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,1,2-Trichloroethane	ND		6.1	1.0	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Trichloroethene	ND		6.1	0.80	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Vinyl chloride	ND		6.1	0.57	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Xylenes, Total	ND		18	2.7	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Cyclohexane	ND		6.1	0.45	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,2-Dibromo-3-Chloropropane	ND		6.1	0.91	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (15')-11/3/11

Lab Sample ID: 180-5526-4

Date Collected: 11/03/11 09:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 86.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		6.1	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Dichlorodifluoromethane	ND		6.1	0.81	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
cis-1,2-Dichloroethene	ND		6.1	0.86	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
trans-1,2-Dichloroethene	ND		6.1	0.73	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Isopropylbenzene	ND		6.1	0.83	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Methyl acetate	ND		6.1	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Methylcyclohexane	ND		6.1	0.89	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Methyl tert-butyl ether	ND		6.1	0.91	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Trichlorofluoromethane	ND		6.1	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.1	1.3	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,2-Dichlorobenzene	ND		6.1	0.97	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,3-Dichlorobenzene	ND		6.1	0.80	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,4-Dichlorobenzene	ND		6.1	0.78	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,2,4-Trichlorobenzene	ND		6.1	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Toluene	ND		6.1	0.89	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
N-Propylbenzene	ND		6.1	0.93	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,2,3-Trichloropropane	ND		6.1	1.1	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,3,5-Trimethylbenzene	ND		6.1	0.82	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
tert-Butylbenzene	ND		6.1	0.86	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
1,2,4-Trimethylbenzene	ND		6.1	0.79	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
sec-Butylbenzene	ND		6.1	0.96	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
n-Butylbenzene	ND		6.1	0.98	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Hexachlorobutadiene	ND		6.1	1.4	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Naphthalene	1.5	J B	6.1	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Acrolein	ND		120	8.6	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Acrylonitrile	ND		120	13	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Methacrylonitrile	ND		6.1	0.36	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Isobutyl alcohol	ND		240	32	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Methyl methacrylate	ND		6.1	0.84	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Ethyl methacrylate	ND		6.1	0.52	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Vinyl acetate	ND		6.1	0.43	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1
Hexane	5.5	J	6.1	1.2	ug/Kg	☼	11/08/11 04:08	11/08/11 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		52 - 124	11/08/11 04:08	11/08/11 12:12	1
Toluene-d8 (Surr)	107		72 - 127	11/08/11 04:08	11/08/11 12:12	1
4-Bromofluorobenzene (Surr)	94		63 - 120	11/08/11 04:08	11/08/11 12:12	1
Dibromofluoromethane (Surr)	93		68 - 121	11/08/11 04:08	11/08/11 12:12	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.38	0.029	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Acenaphthene	ND		0.077	0.0074	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Acetophenone	ND		0.38	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Acenaphthylene	ND		0.077	0.0088	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Anthracene	ND		0.077	0.0075	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzo[a]anthracene	0.011	J	0.077	0.0096	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzo[a]pyrene	ND		0.077	0.0077	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzo[b]fluoranthene	ND		0.077	0.012	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzo[g,h,i]perylene	ND		0.077	0.0076	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzo[k]fluoranthene	ND		0.077	0.015	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (15')-11/3/11

Lab Sample ID: 180-5526-4

Date Collected: 11/03/11 09:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 86.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		0.077	0.010	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Bis(2-chloroethoxy)methane	ND		0.38	0.025	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2,2'-oxybis[1-chloropropane]	ND		0.077	0.0083	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Bis(2-ethylhexyl) phthalate	ND		0.77	0.062	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
4-Bromophenyl phenyl ether	ND		0.38	0.033	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Butyl benzyl phthalate	ND		0.38	0.052	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Carbazole	ND		0.077	0.0071	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
4-Chloroaniline	ND		0.38	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2-Chloronaphthalene	ND		0.077	0.0080	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
4-Chlorophenyl phenyl ether	ND		0.38	0.043	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Chrysene	ND		0.077	0.0091	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Dibenz(a,h)anthracene	ND		0.077	0.0085	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Di-n-butyl phthalate	ND		0.38	0.048	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
3,3'-Dichlorobenzidine	ND		0.38	0.040	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Diethyl phthalate	ND		0.38	0.042	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Dimethyl phthalate	ND		0.38	0.042	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2,4-Dinitrotoluene	ND		0.38	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2,6-Dinitrotoluene	ND		0.38	0.039	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Di-n-octyl phthalate	ND		0.38	0.040	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Fluoranthene	0.015	J	0.077	0.0082	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Fluorene	ND		0.077	0.010	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Hexachlorobenzene	ND		0.077	0.0082	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
3,3'-Dimethylbenzidine	ND		2.0	0.020	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Hexachlorobutadiene	ND		0.077	0.0086	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Hexachlorocyclopentadiene	ND		0.38	0.041	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Hexachloroethane	ND		0.38	0.028	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Indeno[1,2,3-cd]pyrene	ND		0.077	0.0079	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Isophorone	ND		0.38	0.029	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2-Methylnaphthalene	0.050	J	0.077	0.0069	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Naphthalene	0.075	J	0.077	0.0066	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2-Nitroaniline	ND		2.0	0.17	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
3-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
4-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Nitrobenzene	ND		0.77	0.032	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
N-Nitrosodi-n-propylamine	ND		0.077	0.0090	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
N-Nitrosodiphenylamine	ND		0.38	0.035	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Phenanthrene	0.027	J	0.077	0.012	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Pyrene	0.011	J	0.077	0.0077	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
4-Chloro-3-methylphenol	ND		0.38	0.035	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2-Chlorophenol	ND		0.38	0.031	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Aniline	ND		0.38	0.030	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2-Methylphenol	ND		0.38	0.027	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Methylphenol, 3 & 4	ND		0.38	0.037	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2,4-Dichlorophenol	ND		0.077	0.0077	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2,4-Dimethylphenol	ND		0.38	0.060	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2,4-Dinitrophenol	ND		2.0	0.46	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
4,6-Dinitro-2-methylphenol	ND		2.0	0.15	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2-Nitrophenol	ND		0.38	0.042	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzyl alcohol	ND		0.38	0.046	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
4-Nitrophenol	ND		2.0	0.14	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (15')-11/3/11

Lab Sample ID: 180-5526-4

Date Collected: 11/03/11 09:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 86.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.38	0.034	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Phenol	ND		0.077	0.0090	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2,4,5-Trichlorophenol	ND		0.38	0.041	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
2,4,6-Trichlorophenol	ND		0.38	0.057	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
1,1'-Biphenyl	ND		0.38	0.034	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Caprolactam	ND		2.0	0.29	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzaldehyde	ND		0.38	0.057	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Atrazine	ND *		0.38	0.037	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzoic acid	ND		2.0	0.16	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Benzidine	ND		7.7	1.6	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
1,4-Dioxane	ND		0.77	0.044	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.38	0.049	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
o-Toluidine	ND		0.38	0.028	mg/Kg	☼	11/07/11 04:22	11/09/11 01:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	77		25 - 104				11/07/11 04:22	11/09/11 01:11	1
2-Fluorobiphenyl	76		35 - 105				11/07/11 04:22	11/09/11 01:11	1
Terphenyl-d14	78		25 - 127				11/07/11 04:22	11/09/11 01:11	1
Phenol-d5	87		25 - 105				11/07/11 04:22	11/09/11 01:11	1
2-Fluorophenol	73		39 - 103				11/07/11 04:22	11/09/11 01:11	1
2,4,6-Tribromophenol	71		35 - 124				11/07/11 04:22	11/09/11 01:11	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0019	0.00025	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
4,4'-DDE	ND		0.0019	0.00029	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
4,4'-DDT	ND		0.0019	0.00028	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Aldrin	ND		0.0019	0.00034	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
alpha-BHC	ND		0.0019	0.00031	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
beta-BHC	ND		0.0019	0.00049	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
delta-BHC	0.00053	J p	0.0019	0.00029	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Dieldrin	ND		0.0019	0.00032	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Endosulfan I	ND		0.0019	0.00036	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Endosulfan II	ND		0.0019	0.00034	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Endosulfan sulfate	ND		0.0019	0.00020	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Endrin	ND		0.0019	0.00037	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Diallate	ND		0.038	0.0032	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
gamma-BHC (Lindane)	ND		0.0019	0.00033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
gamma-Chlordane	ND		0.0019	0.00037	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Heptachlor	ND		0.0019	0.00042	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Heptachlor epoxide	ND		0.0019	0.00037	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Methoxychlor	ND		0.0038	0.00040	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Toxaphene	ND		0.076	0.013	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Chlordane (technical)	ND		0.019	0.00084	mg/Kg	☼	11/07/11 04:27	11/11/11 17:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		45 - 130				11/07/11 04:27	11/11/11 17:59	1
Tetrachloro-m-xylene	80		45 - 130				11/07/11 04:27	11/11/11 17:59	1
DCB Decachlorobiphenyl (Surr)	83		45 - 130				11/07/11 04:27	11/11/11 17:59	1
DCB Decachlorobiphenyl (Surr)	85		45 - 130				11/07/11 04:27	11/11/11 17:59	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (15')-11/3/11

Lab Sample ID: 180-5526-4

Date Collected: 11/03/11 09:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 86.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0028	mg/Kg	☼	11/07/11 04:27	11/11/11 17:28	1
PCB-1221	ND		0.019	0.0036	mg/Kg	☼	11/07/11 04:27	11/11/11 17:28	1
PCB-1232	ND		0.019	0.0033	mg/Kg	☼	11/07/11 04:27	11/11/11 17:28	1
PCB-1242	ND		0.019	0.0031	mg/Kg	☼	11/07/11 04:27	11/11/11 17:28	1
PCB-1248	ND		0.019	0.0018	mg/Kg	☼	11/07/11 04:27	11/11/11 17:28	1
PCB-1254	ND		0.019	0.0027	mg/Kg	☼	11/07/11 04:27	11/11/11 17:28	1
PCB-1260	ND		0.019	0.0027	mg/Kg	☼	11/07/11 04:27	11/11/11 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		35 - 140	11/07/11 04:27	11/11/11 17:28	1
DCB Decachlorobiphenyl (Surr)	94		35 - 140	11/07/11 04:27	11/11/11 17:28	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.092	0.0063	mg/Kg	☼	11/11/11 03:12	11/18/11 16:23	20
2,4,5-T	ND		0.023	0.0029	mg/Kg	☼	11/11/11 03:12	11/18/11 16:23	20
Silvex (2,4,5-TP)	ND		0.023	0.0024	mg/Kg	☼	11/11/11 03:12	11/18/11 16:23	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	56		42 - 140	11/11/11 03:12	11/18/11 15:59	20
2,4-Dichlorophenylacetic acid	63		42 - 140	11/11/11 03:12	11/18/11 16:23	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.18	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Arsenic	5.1		1.1	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Barium	220	B	22	0.054	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Boron	81		22	0.28	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Beryllium	4.3	B	0.43	0.016	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Cadmium	0.23	J	0.54	0.026	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Chromium	5.3		1.1	0.18	mg/Kg	☼	11/14/11 10:12	11/16/11 11:58	2
Cobalt	1.6	J	5.4	0.096	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Copper	3.5		2.7	0.37	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Lead	0.80		0.32	0.16	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Manganese	4000	B	3.2	0.10	mg/Kg	☼	11/14/11 10:12	11/16/11 11:58	2
Nickel	2.2	J	4.3	0.41	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Selenium	1.7		1.1	0.45	mg/Kg	☼	11/14/11 10:12	11/16/11 11:58	2
Silver	ND		1.1	0.13	mg/Kg	☼	11/14/11 10:12	11/16/11 11:58	2
Thallium	ND		2.2	0.45	mg/Kg	☼	11/14/11 10:12	11/16/11 11:58	2
Vanadium	13		5.4	0.20	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Zinc	1.8	J B	2.2	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1
Tin	1.3	J	11	0.58	mg/Kg	☼	11/14/11 10:12	11/15/11 17:51	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.038	0.012	mg/Kg	☼	11/15/11 03:50	11/15/11 10:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	5.3		0.013	0.0021	mg/Kg			11/29/11 12:19	1
Cr (VI)	ND		0.46	0.12	mg/Kg	☼	11/18/11 10:00	11/22/11 15:14	1
Percent Moisture	13		0.10	0.10	%			11/03/11 16:10	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1 (15')-11/3/11

Lab Sample ID: 180-5526-4

Date Collected: 11/03/11 09:50

Matrix: Solid

Date Received: 11/03/11 11:15

Percent Solids: 86.6

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	20		2.9	0.57	mg/Kg	☼	11/08/11 14:34	11/09/11 15:16	5
Cyanide, Weak Acid Dissociable	1.5		0.59	0.19	mg/Kg	☼	11/16/11 11:49	11/16/11 15:08	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.46	0.11	mg/Kg	☼	11/22/11 13:00	11/23/11 10:14	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42	B	9.9	2.2	mg/Kg			11/08/11 19:17	1
Nitrate as N	0.98		0.50	0.15	mg/Kg			11/08/11 19:17	1
Nitrite as N	0.59		0.50	0.16	mg/Kg			11/08/11 19:17	1
Sulfate	5400	B	99	12	mg/Kg			11/08/11 19:31	10

Client Sample ID: B-5(6')-11/4/11

Lab Sample ID: 180-5622-1

Date Collected: 11/04/11 09:00

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 89.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		22	5.4	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Benzene	ND		5.4	0.73	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Bromodichloromethane	ND		5.4	0.60	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Bromoform	ND		5.4	0.48	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Bromomethane	ND		5.4	0.80	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
2-Butanone (MEK)	ND		5.4	0.95	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Carbon disulfide	ND		5.4	0.55	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Carbon tetrachloride	ND		5.4	0.48	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Chlorobenzene	ND		5.4	0.82	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Chloroethane	ND		5.4	1.7	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Chloroform	ND		5.4	0.63	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Chloromethane	ND		5.4	0.92	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Dibromochloromethane	ND		5.4	0.76	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,1-Dichloroethane	ND		5.4	0.62	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,2-Dichloroethane	ND		5.4	0.66	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,1-Dichloroethene	ND		5.4	0.91	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Acetonitrile	ND		110	25	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,2-Dichloropropane	ND		5.4	0.58	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
cis-1,3-Dichloropropene	ND		5.4	0.73	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
trans-1,3-Dichloropropene	ND		5.4	0.64	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Ethylbenzene	ND		5.4	0.69	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
2-Hexanone	ND		5.4	0.74	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Methylene Chloride	6.8	B	5.4	0.72	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.4	0.70	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Bromochloromethane	ND		5.4	0.74	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Styrene	ND		5.4	0.76	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,1,2,2-Tetrachloroethane	ND		5.4	0.77	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Tetrachloroethene	ND		5.4	0.73	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,1,1-Trichloroethane	ND		5.4	0.52	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,1,2-Trichloroethane	ND		5.4	0.90	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(6')-11/4/11

Lab Sample ID: 180-5622-1

Date Collected: 11/04/11 09:00

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 89.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.4	0.71	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Vinyl chloride	ND		5.4	0.51	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Xylenes, Total	ND		16	2.4	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Cyclohexane	ND		5.4	0.40	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,2-Dibromo-3-Chloropropane	ND		5.4	0.81	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,2-Dibromoethane (EDB)	ND		5.4	0.93	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Dichlorodifluoromethane	ND		5.4	0.72	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
cis-1,2-Dichloroethene	ND		5.4	0.76	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
trans-1,2-Dichloroethene	ND		5.4	0.64	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Isopropylbenzene	ND		5.4	0.73	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Methyl acetate	ND		5.4	0.97	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Methylcyclohexane	ND		5.4	0.78	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Methyl tert-butyl ether	ND		5.4	0.81	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Trichlorofluoromethane	ND		5.4	0.99	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.1	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,2-Dichlorobenzene	ND		5.4	0.86	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,3-Dichlorobenzene	ND		5.4	0.71	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,4-Dichlorobenzene	ND		5.4	0.69	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,2,4-Trichlorobenzene	ND		5.4	0.95	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Toluene	ND		5.4	0.79	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
N-Propylbenzene	ND		5.4	0.82	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,2,3-Trichloropropane	ND		5.4	1.0	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,3,5-Trimethylbenzene	ND		5.4	0.72	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
tert-Butylbenzene	ND		5.4	0.76	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
1,2,4-Trimethylbenzene	ND		5.4	0.70	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
sec-Butylbenzene	ND		5.4	0.84	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
n-Butylbenzene	ND		5.4	0.86	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Hexachlorobutadiene	ND		5.4	1.2	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Naphthalene	ND		5.4	1.1	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Acrolein	ND		110	7.6	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Acrylonitrile	ND		110	11	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Methacrylonitrile	ND		5.4	0.32	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Isobutyl alcohol	ND		220	28	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Methyl methacrylate	ND		5.4	0.74	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Ethyl methacrylate	ND		5.4	0.46	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Vinyl acetate	ND		5.4	0.38	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1
Hexane	ND		5.4	1.1	ug/Kg	☼	11/07/11 05:10	11/07/11 10:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		52 - 124	11/07/11 05:10	11/07/11 10:57	1
Toluene-d8 (Surr)	102		72 - 127	11/07/11 05:10	11/07/11 10:57	1
4-Bromofluorobenzene (Surr)	97		63 - 120	11/07/11 05:10	11/07/11 10:57	1
Dibromofluoromethane (Surr)	90		68 - 121	11/07/11 05:10	11/07/11 10:57	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.37	0.028	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Acenaphthene	ND		0.074	0.0071	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Acetophenone	ND		0.37	0.030	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Acenaphthylene	ND		0.074	0.0085	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Anthracene	0.011	J	0.074	0.0072	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(6')-11/4/11

Lab Sample ID: 180-5622-1

Date Collected: 11/04/11 09:00

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 89.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.084		0.074	0.0093	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Benzo[a]pyrene	0.10		0.074	0.0074	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Benzo[b]fluoranthene	0.15		0.074	0.012	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Benzo[g,h,i]perylene	0.095		0.074	0.0074	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Benzo[k]fluoranthene	0.065	J	0.074	0.015	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Bis(2-chloroethyl)ether	ND		0.074	0.0099	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Bis(2-chloroethoxy)methane	ND		0.37	0.024	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2,2'-oxybis[1-chloropropane]	ND		0.074	0.0080	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Bis(2-ethylhexyl) phthalate	0.072	J	0.74	0.060	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
4-Bromophenyl phenyl ether	ND		0.37	0.032	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Butyl benzyl phthalate	ND		0.37	0.051	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Carbazole	0.0070	J	0.074	0.0068	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
4-Chloroaniline	ND		0.37	0.030	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2-Chloronaphthalene	ND		0.074	0.0077	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
4-Chlorophenyl phenyl ether	ND		0.37	0.041	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Chrysene	0.11		0.074	0.0088	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Dibenz(a,h)anthracene	0.041	J	0.074	0.0082	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Di-n-butyl phthalate	ND		0.37	0.046	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
3,3'-Dichlorobenzidine	ND		0.37	0.039	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Diethyl phthalate	ND		0.37	0.040	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Dimethyl phthalate	ND		0.37	0.040	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2,4-Dinitrotoluene	ND		0.37	0.030	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2,6-Dinitrotoluene	ND		0.37	0.038	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Di-n-octyl phthalate	ND		0.37	0.039	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Fluoranthene	0.10		0.074	0.0079	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Fluorene	ND		0.074	0.0098	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Hexachlorobenzene	ND		0.074	0.0079	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
3,3'-Dimethylbenzidine	ND		1.9	0.020	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Hexachlorobutadiene	ND		0.074	0.0083	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Hexachlorocyclopentadiene	ND		0.37	0.040	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Hexachloroethane	ND		0.37	0.027	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Indeno[1,2,3-cd]pyrene	0.091		0.074	0.0076	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Isophorone	ND		0.37	0.028	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2-Methylnaphthalene	0.013	J	0.074	0.0067	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Naphthalene	0.024	J	0.074	0.0064	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2-Nitroaniline	ND		1.9	0.17	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
3-Nitroaniline	ND		1.9	0.15	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
4-Nitroaniline	ND		1.9	0.15	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Nitrobenzene	ND		0.74	0.031	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
N-Nitrosodi-n-propylamine	ND		0.074	0.0087	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
N-Nitrosodiphenylamine	ND		0.37	0.034	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Phenanthrene	0.062	J	0.074	0.012	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Pyrene	0.10		0.074	0.0075	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
4-Chloro-3-methylphenol	ND		0.37	0.034	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2-Chlorophenol	ND		0.37	0.030	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Aniline	ND		0.37	0.029	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2-Methylphenol	ND		0.37	0.026	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Methylphenol, 3 & 4	ND		0.37	0.036	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2,4-Dichlorophenol	ND		0.074	0.0074	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2,4-Dimethylphenol	ND		0.37	0.058	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(6')-11/4/11

Lab Sample ID: 180-5622-1

Date Collected: 11/04/11 09:00

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 89.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		1.9	0.44	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
4,6-Dinitro-2-methylphenol	ND		1.9	0.15	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2-Nitrophenol	ND		0.37	0.041	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Benzyl alcohol	ND		0.37	0.045	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
4-Nitrophenol	ND		1.9	0.14	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Pentachlorophenol	ND		0.37	0.033	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Phenol	ND		0.074	0.0088	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2,4,5-Trichlorophenol	ND		0.37	0.040	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
2,4,6-Trichlorophenol	ND		0.37	0.055	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
1,1'-Biphenyl	ND		0.37	0.033	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Caprolactam	ND		1.9	0.28	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Benzaldehyde	ND		0.37	0.056	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Atrazine	ND		0.37	0.036	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Benzoic acid	ND		1.9	0.15	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
Benzidine	ND		7.4	1.6	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
1,4-Dioxane	ND		0.74	0.042	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.37	0.047	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1
o-Toluidine	ND		0.37	0.028	mg/Kg	☼	11/12/11 03:15	11/14/11 22:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	61		25 - 104	11/12/11 03:15	11/14/11 22:17	1
2-Fluorobiphenyl	59		35 - 105	11/12/11 03:15	11/14/11 22:17	1
Terphenyl-d14	72		25 - 127	11/12/11 03:15	11/14/11 22:17	1
Phenol-d5	69		25 - 105	11/12/11 03:15	11/14/11 22:17	1
2-Fluorophenol	60		39 - 103	11/12/11 03:15	11/14/11 22:17	1
2,4,6-Tribromophenol	45		35 - 124	11/12/11 03:15	11/14/11 22:17	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0019	0.00024	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
4,4'-DDE	ND		0.0019	0.00028	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
4,4'-DDT	ND		0.0019	0.00028	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Aldrin	ND		0.0019	0.00033	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
alpha-BHC	ND		0.0019	0.00030	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
beta-BHC	ND		0.0019	0.00048	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
delta-BHC	ND		0.0019	0.00028	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Dieldrin	ND		0.0019	0.00031	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Endosulfan I	ND		0.0019	0.00035	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Endosulfan II	ND		0.0019	0.00033	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Endosulfan sulfate	ND		0.0019	0.00019	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Endrin	ND		0.0019	0.00036	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Diallate	ND		0.037	0.0031	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
gamma-BHC (Lindane)	0.00061	J	0.0019	0.00033	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
gamma-Chlordane	ND		0.0019	0.00037	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Heptachlor	ND		0.0019	0.00041	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Heptachlor epoxide	ND		0.0019	0.00036	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Methoxychlor	ND		0.0037	0.00039	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Toxaphene	ND		0.074	0.012	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1
Chlordane (technical)	ND		0.019	0.00082	mg/Kg	☼	11/14/11 04:19	11/16/11 12:36	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(6')-11/4/11

Lab Sample ID: 180-5622-1

Date Collected: 11/04/11 09:00

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 89.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		45 - 130	11/14/11 04:19	11/16/11 12:36	1
Tetrachloro-m-xylene	78		45 - 130	11/14/11 04:19	11/16/11 12:36	1
DCB Decachlorobiphenyl (Surr)	74		45 - 130	11/14/11 04:19	11/16/11 12:36	1
DCB Decachlorobiphenyl (Surr)	72		45 - 130	11/14/11 04:19	11/16/11 12:36	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0028	mg/Kg	☼	11/09/11 02:59	11/10/11 03:51	1
PCB-1221	ND		0.019	0.0036	mg/Kg	☼	11/09/11 02:59	11/10/11 03:51	1
PCB-1232	ND		0.019	0.0032	mg/Kg	☼	11/09/11 02:59	11/10/11 03:51	1
PCB-1242	ND		0.019	0.0030	mg/Kg	☼	11/09/11 02:59	11/10/11 03:51	1
PCB-1248	ND		0.019	0.0018	mg/Kg	☼	11/09/11 02:59	11/10/11 03:51	1
PCB-1254	ND		0.019	0.0026	mg/Kg	☼	11/09/11 02:59	11/10/11 03:51	1
PCB-1260	ND		0.019	0.0026	mg/Kg	☼	11/09/11 02:59	11/10/11 03:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	93		35 - 140	11/09/11 02:59	11/10/11 03:51	1
DCB Decachlorobiphenyl (Surr)	93		35 - 140	11/09/11 02:59	11/10/11 03:51	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.089	0.0061	mg/Kg	☼	11/11/11 03:12	11/18/11 16:48	20
2,4,5-T	ND		0.022	0.0028	mg/Kg	☼	11/11/11 03:12	11/18/11 16:48	20
Silvex (2,4,5-TP)	ND		0.022	0.0023	mg/Kg	☼	11/11/11 03:12	11/18/11 16:48	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	44		42 - 140	11/11/11 03:12	11/18/11 16:23	20
2,4-Dichlorophenylacetic acid	48		42 - 140	11/11/11 03:12	11/18/11 16:48	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.17	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Arsenic	4.0		1.1	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Barium	290	B	21	0.053	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Boron	78		21	0.27	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Beryllium	4.6	B	0.43	0.016	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Cadmium	0.10	J	0.53	0.026	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Chromium	5.8		1.1	0.18	mg/Kg	☼	11/14/11 10:12	11/16/11 12:16	2
Cobalt	1.7	J	5.3	0.095	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Copper	6.1		2.7	0.36	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Lead	7.2		0.32	0.15	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Manganese	4100	B	3.2	0.10	mg/Kg	☼	11/14/11 10:12	11/16/11 12:16	2
Nickel	3.6	J	4.3	0.41	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Selenium	1.1		1.1	0.44	mg/Kg	☼	11/14/11 10:12	11/16/11 12:16	2
Silver	ND		1.1	0.12	mg/Kg	☼	11/14/11 10:12	11/16/11 12:16	2
Thallium	ND		2.1	0.44	mg/Kg	☼	11/14/11 10:12	11/16/11 12:16	2
Vanadium	10		5.3	0.20	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Zinc	19	B	2.1	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1
Tin	2.0	J	11	0.57	mg/Kg	☼	11/14/11 10:12	11/15/11 18:22	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(6')-11/4/11

Lab Sample ID: 180-5622-1

Date Collected: 11/04/11 09:00

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 89.5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.036	0.012	mg/Kg	☼	11/16/11 03:30	11/16/11 08:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	5.8		0.013	0.0021	mg/Kg			11/29/11 14:59	1
Cr (VI)	ND		0.45	0.11	mg/Kg	☼	11/18/11 10:00	11/22/11 15:33	1
Percent Moisture	11		0.10	0.10	%			11/07/11 15:29	1
Cyanide, Total	6.8		2.7	0.54	mg/Kg	☼	11/18/11 13:22	11/19/11 17:40	5
Cyanide, Weak Acid Dissociable	0.23	J	0.57	0.18	mg/Kg	☼	11/16/11 11:49	11/16/11 15:08	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.44	0.11	mg/Kg	☼	11/22/11 13:00	11/23/11 10:33	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51	B	10	2.2	mg/Kg			11/16/11 18:27	1
Nitrate as N	0.73		0.50	0.15	mg/Kg			11/16/11 18:27	1
Nitrite as N	ND		0.50	0.16	mg/Kg			11/16/11 18:27	1
Sulfate	1900	B	50	5.9	mg/Kg			11/16/11 18:41	5

Client Sample ID: B-5(16')-11/4/11

Lab Sample ID: 180-5622-2

Date Collected: 11/04/11 09:30

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 90.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	5.0	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Benzene	ND		5.0	0.67	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Bromodichloromethane	ND		5.0	0.56	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Bromoform	ND		5.0	0.44	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Bromomethane	ND		5.0	0.73	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
2-Butanone (MEK)	ND		5.0	0.87	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Carbon disulfide	ND		5.0	0.51	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Carbon tetrachloride	ND		5.0	0.44	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Chlorobenzene	ND		5.0	0.75	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Chloroethane	ND		5.0	1.5	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Chloroform	ND		5.0	0.58	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Chloromethane	ND		5.0	0.84	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Dibromochloromethane	ND		5.0	0.70	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,1-Dichloroethane	ND		5.0	0.57	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,2-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,1-Dichloroethene	ND		5.0	0.84	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Acetonitrile	ND		99	23	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,2-Dichloropropane	ND		5.0	0.54	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
cis-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
trans-1,3-Dichloropropene	ND		5.0	0.59	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Ethylbenzene	ND		5.0	0.64	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
2-Hexanone	ND		5.0	0.68	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Methylene Chloride	6.6	B	5.0	0.67	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(16')-11/4/11

Lab Sample ID: 180-5622-2

Date Collected: 11/04/11 09:30

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 90.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.65	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Bromochloromethane	ND		5.0	0.68	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Styrene	ND		5.0	0.70	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.71	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,1,1-Trichloroethane	ND		5.0	0.48	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,1,2-Trichloroethane	ND		5.0	0.82	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Trichloroethene	ND		5.0	0.65	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Vinyl chloride	ND		5.0	0.47	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Xylenes, Total	ND		15	2.2	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Cyclohexane	ND		5.0	0.37	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.74	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,2-Dibromoethane (EDB)	ND		5.0	0.86	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Dichlorodifluoromethane	ND		5.0	0.66	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
cis-1,2-Dichloroethene	ND		5.0	0.70	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
trans-1,2-Dichloroethene	ND		5.0	0.59	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Isopropylbenzene	ND		5.0	0.67	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Methyl acetate	ND		5.0	0.89	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Methylcyclohexane	ND		5.0	0.72	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Methyl tert-butyl ether	ND		5.0	0.74	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Trichlorofluoromethane	ND		5.0	0.91	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,2-Dichlorobenzene	ND		5.0	0.79	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,3-Dichlorobenzene	ND		5.0	0.65	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,4-Dichlorobenzene	ND		5.0	0.63	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,2,4-Trichlorobenzene	ND		5.0	0.87	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Toluene	ND		5.0	0.72	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
N-Propylbenzene	ND		5.0	0.76	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,2,3-Trichloropropane	ND		5.0	0.92	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,3,5-Trimethylbenzene	ND		5.0	0.66	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
tert-Butylbenzene	ND		5.0	0.70	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
1,2,4-Trimethylbenzene	ND		5.0	0.64	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
sec-Butylbenzene	ND		5.0	0.78	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
n-Butylbenzene	ND		5.0	0.79	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Hexachlorobutadiene	ND		5.0	1.1	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Naphthalene	ND		5.0	1.0	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Acrolein	ND		99	7.0	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Acrylonitrile	ND		99	10	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Methacrylonitrile	ND		5.0	0.29	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Isobutyl alcohol	ND		200	26	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Methyl methacrylate	ND		5.0	0.68	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Ethyl methacrylate	ND		5.0	0.42	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Vinyl acetate	ND		5.0	0.35	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1
Hexane	ND		5.0	1.0	ug/Kg	☼	11/07/11 05:10	11/07/11 11:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		52 - 124	11/07/11 05:10	11/07/11 11:19	1
Toluene-d8 (Surr)	109		72 - 127	11/07/11 05:10	11/07/11 11:19	1
4-Bromofluorobenzene (Surr)	100		63 - 120	11/07/11 05:10	11/07/11 11:19	1
Dibromofluoromethane (Surr)	83		68 - 121	11/07/11 05:10	11/07/11 11:19	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(16')-11/4/11

Lab Sample ID: 180-5622-2

Date Collected: 11/04/11 09:30

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 90.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.36	0.028	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Acenaphthene	ND		0.073	0.0070	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Acetophenone	ND		0.36	0.030	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Acenaphthylene	ND		0.073	0.0084	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Anthracene	ND		0.073	0.0071	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzo[a]anthracene	ND		0.073	0.0092	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzo[a]pyrene	ND		0.073	0.0073	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzo[b]fluoranthene	ND		0.073	0.011	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzo[g,h,i]perylene	ND		0.073	0.0073	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzo[k]fluoranthene	ND		0.073	0.015	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Bis(2-chloroethyl)ether	ND		0.073	0.0098	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Bis(2-chloroethoxy)methane	ND		0.36	0.024	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2,2'-oxybis[1-chloropropane]	ND		0.073	0.0079	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Bis(2-ethylhexyl) phthalate	0.087	J	0.73	0.059	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
4-Bromophenyl phenyl ether	ND		0.36	0.032	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Butyl benzyl phthalate	ND		0.36	0.050	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Carbazole	ND		0.073	0.0067	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
4-Chloroaniline	ND		0.36	0.029	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2-Chloronaphthalene	ND		0.073	0.0076	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
4-Chlorophenyl phenyl ether	ND		0.36	0.041	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Chrysene	ND		0.073	0.0087	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Dibenz(a,h)anthracene	ND		0.073	0.0081	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Di-n-butyl phthalate	ND		0.36	0.046	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
3,3'-Dichlorobenzidine	ND		0.36	0.039	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Diethyl phthalate	0.045	J	0.36	0.040	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Dimethyl phthalate	ND		0.36	0.040	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2,4-Dinitrotoluene	ND		0.36	0.029	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2,6-Dinitrotoluene	ND		0.36	0.038	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Di-n-octyl phthalate	ND		0.36	0.038	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Fluoranthene	0.0087	J	0.073	0.0078	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Fluorene	ND		0.073	0.0096	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Hexachlorobenzene	ND		0.073	0.0078	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
3,3'-Dimethylbenzidine	ND		1.9	0.019	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Hexachlorobutadiene	ND		0.073	0.0082	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Hexachlorocyclopentadiene	ND		0.36	0.039	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Hexachloroethane	ND		0.36	0.026	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Indeno[1,2,3-cd]pyrene	ND		0.073	0.0075	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Isophorone	ND		0.36	0.028	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2-Methylnaphthalene	0.029	J	0.073	0.0066	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Naphthalene	0.17		0.073	0.0063	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2-Nitroaniline	ND		1.9	0.16	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
3-Nitroaniline	ND		1.9	0.15	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
4-Nitroaniline	ND		1.9	0.15	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Nitrobenzene	ND		0.73	0.030	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
N-Nitrosodi-n-propylamine	ND		0.073	0.0086	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
N-Nitrosodiphenylamine	ND		0.36	0.034	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Phenanthrene	0.016	J	0.073	0.012	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Pyrene	0.0079	J	0.073	0.0074	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
4-Chloro-3-methylphenol	ND		0.36	0.034	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2-Chlorophenol	ND		0.36	0.030	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(16')-11/4/11

Lab Sample ID: 180-5622-2

Date Collected: 11/04/11 09:30

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 90.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		0.36	0.028	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2-Methylphenol	ND		0.36	0.026	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Methylphenol, 3 & 4	ND		0.36	0.036	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2,4-Dichlorophenol	ND		0.073	0.0073	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2,4-Dimethylphenol	ND		0.36	0.057	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2,4-Dinitrophenol	ND		1.9	0.43	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
4,6-Dinitro-2-methylphenol	ND		1.9	0.15	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2-Nitrophenol	ND		0.36	0.040	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzyl alcohol	ND		0.36	0.044	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
4-Nitrophenol	ND		1.9	0.13	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Pentachlorophenol	ND		0.36	0.033	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Phenol	ND		0.073	0.0086	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2,4,5-Trichlorophenol	ND		0.36	0.039	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
2,4,6-Trichlorophenol	ND		0.36	0.055	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
1,1'-Biphenyl	ND		0.36	0.033	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Caprolactam	ND		1.9	0.28	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzaldehyde	ND		0.36	0.055	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Atrazine	ND		0.36	0.036	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzoic acid	ND		1.9	0.15	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
Benzidine	ND		7.3	1.5	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
1,4-Dioxane	ND		0.73	0.042	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.36	0.047	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1
o-Toluidine	ND		0.36	0.027	mg/Kg	☼	11/12/11 03:15	11/21/11 15:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	69		25 - 104	11/12/11 03:15	11/21/11 15:01	1
2-Fluorobiphenyl	68		35 - 105	11/12/11 03:15	11/21/11 15:01	1
Terphenyl-d14	69		25 - 127	11/12/11 03:15	11/21/11 15:01	1
Phenol-d5	79		25 - 105	11/12/11 03:15	11/21/11 15:01	1
2-Fluorophenol	66		39 - 103	11/12/11 03:15	11/21/11 15:01	1
2,4,6-Tribromophenol	44		35 - 124	11/12/11 03:15	11/21/11 15:01	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0019	0.00024	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
4,4'-DDE	ND		0.0019	0.00028	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
4,4'-DDT	0.00080	J p	0.0019	0.00027	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Aldrin	ND		0.0019	0.00033	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
alpha-BHC	ND		0.0019	0.00030	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
beta-BHC	ND		0.0019	0.00048	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
delta-BHC	ND		0.0019	0.00028	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Dieldrin	ND		0.0019	0.00031	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Endosulfan I	ND		0.0019	0.00035	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Endosulfan II	ND		0.0019	0.00032	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Endosulfan sulfate	ND		0.0019	0.00019	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Endrin	ND		0.0019	0.00036	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Diallate	ND		0.036	0.0031	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
gamma-BHC (Lindane)	ND		0.0019	0.00032	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
gamma-Chlordane	ND		0.0019	0.00036	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Heptachlor	ND		0.0019	0.00041	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(16')-11/4/11

Lab Sample ID: 180-5622-2

Date Collected: 11/04/11 09:30

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 90.7

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor epoxide	ND		0.0019	0.00036	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Methoxychlor	ND		0.0036	0.00038	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Toxaphene	ND		0.074	0.012	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1
Chlordane (technical)	ND		0.019	0.00081	mg/Kg	☼	11/14/11 04:19	11/16/11 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	78		45 - 130	11/14/11 04:19	11/16/11 12:55	1
Tetrachloro-m-xylene	79		45 - 130	11/14/11 04:19	11/16/11 12:55	1
DCB Decachlorobiphenyl (Surr)	80		45 - 130	11/14/11 04:19	11/16/11 12:55	1
DCB Decachlorobiphenyl (Surr)	75		45 - 130	11/14/11 04:19	11/16/11 12:55	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.018	0.0027	mg/Kg	☼	11/09/11 02:59	11/10/11 04:18	1
PCB-1221	ND		0.018	0.0035	mg/Kg	☼	11/09/11 02:59	11/10/11 04:18	1
PCB-1232	ND		0.018	0.0031	mg/Kg	☼	11/09/11 02:59	11/10/11 04:18	1
PCB-1242	ND		0.018	0.0030	mg/Kg	☼	11/09/11 02:59	11/10/11 04:18	1
PCB-1248	ND		0.018	0.0017	mg/Kg	☼	11/09/11 02:59	11/10/11 04:18	1
PCB-1254	ND		0.018	0.0026	mg/Kg	☼	11/09/11 02:59	11/10/11 04:18	1
PCB-1260	ND		0.018	0.0026	mg/Kg	☼	11/09/11 02:59	11/10/11 04:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		35 - 140	11/09/11 02:59	11/10/11 04:18	1
DCB Decachlorobiphenyl (Surr)	97		35 - 140	11/09/11 02:59	11/10/11 04:18	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.088	0.0060	mg/Kg	☼	11/11/11 03:12	11/18/11 17:12	20
2,4,5-T	ND		0.022	0.0028	mg/Kg	☼	11/11/11 03:12	11/18/11 17:12	20
Silvex (2,4,5-TP)	ND		0.022	0.0023	mg/Kg	☼	11/11/11 03:12	11/18/11 17:12	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	49		42 - 140	11/11/11 03:12	11/18/11 16:48	20
2,4-Dichlorophenylacetic acid	53		42 - 140	11/11/11 03:12	11/18/11 17:12	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.18	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Arsenic	1.8		1.1	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Barium	210	B	22	0.055	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Boron	88		22	0.28	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Beryllium	4.5	B	0.44	0.016	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Cadmium	ND		0.55	0.026	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Chromium	13		1.1	0.19	mg/Kg	☼	11/14/11 10:12	11/16/11 12:22	2
Cobalt	0.29	J	5.5	0.097	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Copper	15		2.7	0.37	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Lead	0.30	J	0.33	0.16	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Manganese	2800	B	3.3	0.10	mg/Kg	☼	11/14/11 10:12	11/16/11 12:22	2
Nickel	4.1	J	4.4	0.42	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Selenium	0.94	J	1.1	0.45	mg/Kg	☼	11/14/11 10:12	11/16/11 12:22	2
Silver	ND		1.1	0.13	mg/Kg	☼	11/14/11 10:12	11/16/11 12:22	2
Thallium	ND		2.2	0.45	mg/Kg	☼	11/14/11 10:12	11/16/11 12:22	2

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5(16')-11/4/11

Lab Sample ID: 180-5622-2

Date Collected: 11/04/11 09:30

Matrix: Solid

Date Received: 11/04/11 13:00

Percent Solids: 90.7

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	5.8		5.5	0.20	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Zinc	5.4	B	2.2	0.24	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1
Tin	1.9	J	11	0.58	mg/Kg	☼	11/14/11 10:12	11/15/11 18:40	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.036	0.012	mg/Kg	☼	11/16/11 03:30	11/16/11 08:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	13		0.013	0.0021	mg/Kg			11/29/11 14:59	1
Cr (VI)	ND		0.44	0.11	mg/Kg	☼	11/18/11 10:00	11/22/11 15:34	1
Percent Moisture	9.3		0.10	0.10	%			11/07/11 15:29	1
Cyanide, Total	5.9		2.7	0.54	mg/Kg	☼	11/18/11 13:22	11/19/11 17:40	5
Cyanide, Weak Acid Dissociable	0.35	J	0.55	0.17	mg/Kg	☼	11/16/11 11:49	11/16/11 15:09	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.43	0.11	mg/Kg	☼	11/22/11 13:00	11/23/11 10:34	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230	B	9.9	2.2	mg/Kg			11/16/11 18:55	1
Nitrate as N	ND		0.49	0.15	mg/Kg			11/16/11 18:55	1
Nitrite as N	ND		0.49	0.16	mg/Kg			11/16/11 18:55	1
Sulfate	1900	B	99	12	mg/Kg			11/16/11 19:09	10

Client Sample ID: B-4 (6')-11-7-11

Lab Sample ID: 180-5679-1

Date Collected: 11/07/11 09:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		26	6.4	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Benzene	ND		6.4	0.86	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Bromodichloromethane	ND		6.4	0.72	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Bromoform	ND		6.4	0.57	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Bromomethane	ND		6.4	0.94	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
2-Butanone (MEK)	ND		6.4	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Carbon disulfide	ND		6.4	0.66	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Carbon tetrachloride	ND		6.4	0.57	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Chlorobenzene	ND		6.4	0.97	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Chloroethane	ND		6.4	2.0	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Chloroform	ND		6.4	0.75	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Chloromethane	ND		6.4	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Dibromochloromethane	ND		6.4	0.91	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,1-Dichloroethane	ND		6.4	0.74	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,2-Dichloroethane	ND		6.4	0.78	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,1-Dichloroethene	ND		6.4	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Acetonitrile	ND		130	29	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (6')-11-7-11

Lab Sample ID: 180-5679-1

Date Collected: 11/07/11 09:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		6.4	0.69	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
cis-1,3-Dichloropropene	ND		6.4	0.87	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
trans-1,3-Dichloropropene	ND		6.4	0.76	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Ethylbenzene	ND		6.4	0.82	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
2-Hexanone	ND		6.4	0.88	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Methylene Chloride	1.9	J B	6.4	0.86	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
4-Methyl-2-pentanone (MIBK)	ND		6.4	0.83	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Bromochloromethane	ND		6.4	0.88	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Styrene	ND		6.4	0.90	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,1,2,2-Tetrachloroethane	ND		6.4	0.92	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Tetrachloroethene	ND		6.4	0.87	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,1,1-Trichloroethane	ND		6.4	0.62	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,1,2-Trichloroethane	ND		6.4	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Trichloroethene	ND		6.4	0.84	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Vinyl chloride	ND		6.4	0.60	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Xylenes, Total	ND		19	2.9	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Cyclohexane	ND		6.4	0.47	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,2-Dibromo-3-Chloropropane	ND		6.4	0.96	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,2-Dibromoethane (EDB)	ND		6.4	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Dichlorodifluoromethane	ND		6.4	0.85	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
cis-1,2-Dichloroethene	ND		6.4	0.90	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
trans-1,2-Dichloroethene	ND		6.4	0.76	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Isopropylbenzene	ND		6.4	0.87	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Methyl acetate	ND		6.4	1.2	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Methylcyclohexane	ND		6.4	0.93	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Methyl tert-butyl ether	ND		6.4	0.96	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Trichlorofluoromethane	ND		6.4	1.2	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.4	1.4	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,2-Dichlorobenzene	ND		6.4	1.0	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,3-Dichlorobenzene	ND		6.4	0.84	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,4-Dichlorobenzene	ND		6.4	0.81	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,2,4-Trichlorobenzene	ND		6.4	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Toluene	ND		6.4	0.93	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
N-Propylbenzene	ND		6.4	0.98	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,2,3-Trichloropropane	ND		6.4	1.2	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,3,5-Trimethylbenzene	ND		6.4	0.85	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
tert-Butylbenzene	ND		6.4	0.90	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
1,2,4-Trimethylbenzene	ND		6.4	0.83	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
sec-Butylbenzene	ND		6.4	1.0	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
n-Butylbenzene	ND		6.4	1.0	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Hexachlorobutadiene	ND		6.4	1.4	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Naphthalene	ND		6.4	1.3	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Acrolein	ND		130	9.0	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Acrylonitrile	ND		130	13	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Methacrylonitrile	ND		6.4	0.38	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Isobutyl alcohol	ND		260	33	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Methyl methacrylate	ND		6.4	0.88	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Ethyl methacrylate	ND		6.4	0.54	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Vinyl acetate	ND		6.4	0.45	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1
Hexane	ND		6.4	1.3	ug/Kg	☼	11/09/11 05:26	11/09/11 17:34	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (6')-11-7-11

Lab Sample ID: 180-5679-1

Date Collected: 11/07/11 09:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 85.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		52 - 124	11/09/11 05:26	11/09/11 17:34	1
Toluene-d8 (Surr)	103		72 - 127	11/09/11 05:26	11/09/11 17:34	1
4-Bromofluorobenzene (Surr)	103		63 - 120	11/09/11 05:26	11/09/11 17:34	1
Dibromofluoromethane (Surr)	105		68 - 121	11/09/11 05:26	11/09/11 17:34	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.38	0.029	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Acenaphthene	ND		0.077	0.0074	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Acetophenone	ND		0.38	0.032	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Acenaphthylene	ND		0.077	0.0088	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Anthracene	0.013	J	0.077	0.0075	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzo[a]anthracene	0.053	J	0.077	0.0097	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzo[a]pyrene	0.078		0.077	0.0077	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzo[b]fluoranthene	0.079		0.077	0.012	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzo[g,h,i]perylene	0.060	J	0.077	0.0077	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzo[k]fluoranthene	0.059	J	0.077	0.016	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Bis(2-chloroethyl)ether	ND		0.077	0.010	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Bis(2-chloroethoxy)methane	ND		0.38	0.025	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2,2'-oxybis[1-chloropropane]	ND		0.077	0.0083	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Bis(2-ethylhexyl) phthalate	ND		0.77	0.062	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
4-Bromophenyl phenyl ether	ND		0.38	0.034	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Butyl benzyl phthalate	ND		0.38	0.053	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Carbazole	0.015	J	0.077	0.0071	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
4-Chloroaniline	ND		0.38	0.031	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2-Chloronaphthalene	ND		0.077	0.0081	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
4-Chlorophenyl phenyl ether	ND		0.38	0.043	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Chrysene	0.062	J	0.077	0.0092	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Dibenz[a,h]anthracene	0.025	J	0.077	0.0086	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Di-n-butyl phthalate	ND		0.38	0.048	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
3,3'-Dichlorobenzidine	ND		0.38	0.041	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Diethyl phthalate	ND		0.38	0.042	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Dimethyl phthalate	ND		0.38	0.042	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2,4-Dinitrotoluene	ND		0.38	0.031	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2,6-Dinitrotoluene	ND		0.38	0.040	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Di-n-octyl phthalate	ND		0.38	0.041	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Fluoranthene	0.075	J	0.077	0.0082	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Fluorene	0.017	J	0.077	0.010	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Hexachlorobenzene	ND		0.077	0.0082	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
3,3'-Dimethylbenzidine	ND		2.0	0.021	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Hexachlorobutadiene	ND		0.077	0.0086	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Hexachlorocyclopentadiene	ND		0.38	0.042	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Hexachloroethane	ND		0.38	0.028	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Indeno[1,2,3-cd]pyrene	0.055	J	0.077	0.0079	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Isophorone	ND		0.38	0.029	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2-Methylnaphthalene	0.018	J	0.077	0.0069	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Naphthalene	0.029	J	0.077	0.0066	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2-Nitroaniline	ND		2.0	0.17	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
3-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
4-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Nitrobenzene	ND		0.77	0.032	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (6')-11-7-11

Lab Sample ID: 180-5679-1

Date Collected: 11/07/11 09:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 85.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		0.077	0.0090	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
N-Nitrosodiphenylamine	ND		0.38	0.036	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Phenanthrene	0.068	J	0.077	0.012	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Pyrene	0.063	J	0.077	0.0078	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
4-Chloro-3-methylphenol	ND		0.38	0.036	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2-Chlorophenol	ND		0.38	0.032	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Aniline	ND		0.38	0.030	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2-Methylphenol	ND		0.38	0.027	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Methylphenol, 3 & 4	ND		0.38	0.038	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2,4-Dichlorophenol	ND		0.077	0.0077	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2,4-Dimethylphenol	ND		0.38	0.060	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2,4-Dinitrophenol	ND		2.0	0.46	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
4,6-Dinitro-2-methylphenol	ND		2.0	0.16	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2-Nitrophenol	ND		0.38	0.043	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzyl alcohol	ND		0.38	0.047	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
4-Nitrophenol	ND		2.0	0.14	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Pentachlorophenol	ND		0.38	0.034	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Phenol	ND		0.077	0.0091	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2,4,5-Trichlorophenol	ND		0.38	0.041	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
2,4,6-Trichlorophenol	ND		0.38	0.058	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
1,1'-Biphenyl	ND		0.38	0.034	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Caprolactam	ND		2.0	0.29	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzaldehyde	ND		0.38	0.058	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Atrazine	ND		0.38	0.038	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzoic acid	ND		2.0	0.16	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Benzidine	ND		7.7	1.6	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
1,4-Dioxane	ND		0.77	0.044	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
1,2-Diphenylhydrazine(as	ND		0.38	0.049	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1
Azobenzene)									
o-Toluidine	ND		0.38	0.029	mg/Kg	☼	11/12/11 03:15	11/14/11 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	65		25 - 104	11/12/11 03:15	11/14/11 19:38	1
2-Fluorobiphenyl	64		35 - 105	11/12/11 03:15	11/14/11 19:38	1
Terphenyl-d14	64		25 - 127	11/12/11 03:15	11/14/11 19:38	1
Phenol-d5	58		25 - 105	11/12/11 03:15	11/14/11 19:38	1
2-Fluorophenol	27	X	39 - 103	11/12/11 03:15	11/14/11 19:38	1
2,4,6-Tribromophenol	6	X	35 - 124	11/12/11 03:15	11/14/11 19:38	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.38	0.029	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Acenaphthene	ND		0.078	0.0075	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Acetophenone	ND		0.38	0.032	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Acenaphthylene	ND		0.078	0.0089	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Anthracene	0.012	J	0.078	0.0076	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzo[a]anthracene	0.055	J	0.078	0.0097	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzo[a]pyrene	0.081		0.078	0.0078	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzo[b]fluoranthene	0.097		0.078	0.012	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzo[g,h,i]perylene	0.070	J	0.078	0.0077	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzo[k]fluoranthene	0.049	J	0.078	0.016	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (6')-11-7-11

Lab Sample ID: 180-5679-1

Date Collected: 11/07/11 09:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 85.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		0.078	0.010	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Bis(2-chloroethoxy)methane	ND		0.38	0.026	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2,2'-oxybis[1-chloropropane]	ND		0.078	0.0084	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Bis(2-ethylhexyl) phthalate	ND		0.78	0.063	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
4-Bromophenyl phenyl ether	ND		0.38	0.034	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Butyl benzyl phthalate	ND		0.38	0.053	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Carbazole	0.0095	J	0.078	0.0072	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
4-Chloroaniline	ND		0.38	0.031	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2-Chloronaphthalene	ND		0.078	0.0081	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
4-Chlorophenyl phenyl ether	ND		0.38	0.043	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Chrysene	0.064	J	0.078	0.0092	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Dibenz(a,h)anthracene	0.014	J	0.078	0.0086	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Di-n-butyl phthalate	ND		0.38	0.049	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
3,3'-Dichlorobenzidine	ND		0.38	0.041	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Diethyl phthalate	ND		0.38	0.042	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Dimethyl phthalate	ND		0.38	0.042	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2,4-Dinitrotoluene	ND		0.38	0.031	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2,6-Dinitrotoluene	ND		0.38	0.040	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Di-n-octyl phthalate	ND		0.38	0.041	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Fluoranthene	0.086		0.078	0.0083	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Fluorene	0.012	J	0.078	0.010	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Hexachlorobenzene	ND		0.078	0.0083	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
3,3'-Dimethylbenzidine	ND		2.0	0.021	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Hexachlorobutadiene	ND		0.078	0.0087	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Hexachlorocyclopentadiene	ND		0.38	0.042	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Hexachloroethane	ND		0.38	0.028	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Indeno[1,2,3-cd]pyrene	0.057	J	0.078	0.0080	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Isophorone	ND		0.38	0.029	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2-Methylnaphthalene	0.017	J	0.078	0.0070	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Naphthalene	0.033	J	0.078	0.0067	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2-Nitroaniline	ND		2.0	0.17	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
3-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
4-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Nitrobenzene	ND		0.78	0.032	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
N-Nitrosodi-n-propylamine	ND		0.078	0.0091	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
N-Nitrosodiphenylamine	ND		0.38	0.036	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Phenanthrene	0.081		0.078	0.012	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Pyrene	0.071	J	0.078	0.0079	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
4-Chloro-3-methylphenol	ND		0.38	0.036	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2-Chlorophenol	ND		0.38	0.032	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Aniline	ND		0.38	0.030	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2-Methylphenol	ND		0.38	0.027	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Methylphenol, 3 & 4	ND		0.38	0.038	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2,4-Dichlorophenol	ND		0.078	0.0078	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2,4-Dimethylphenol	ND		0.38	0.061	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2,4-Dinitrophenol	ND		2.0	0.46	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
4,6-Dinitro-2-methylphenol	ND		2.0	0.16	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2-Nitrophenol	ND		0.38	0.043	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzyl alcohol	ND		0.38	0.047	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
4-Nitrophenol	ND		2.0	0.14	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (6')-11-7-11

Lab Sample ID: 180-5679-1

Date Collected: 11/07/11 09:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 85.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.38	0.035	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Phenol	ND		0.078	0.0092	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2,4,5-Trichlorophenol	ND		0.38	0.041	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
2,4,6-Trichlorophenol	ND		0.38	0.058	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
1,1'-Biphenyl	ND		0.38	0.035	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Caprolactam	ND		2.0	0.29	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzaldehyde	ND		0.38	0.058	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Atrazine	ND *		0.38	0.038	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzoic acid	ND		2.0	0.16	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Benzidine	ND		7.8	1.6	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
1,4-Dioxane	ND		0.78	0.045	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
1,2-Diphenylhydrazine(as	ND		0.38	0.050	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1
Azobenzene)									
o-Toluidine	ND		0.38	0.029	mg/Kg	☼	11/18/11 04:12	11/23/11 17:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	72		25 - 104	11/18/11 04:12	11/23/11 17:59	1
2-Fluorobiphenyl	72		35 - 105	11/18/11 04:12	11/23/11 17:59	1
Terphenyl-d14	71		25 - 127	11/18/11 04:12	11/23/11 17:59	1
Phenol-d5	74		25 - 105	11/18/11 04:12	11/23/11 17:59	1
2-Fluorophenol	45		39 - 103	11/18/11 04:12	11/23/11 17:59	1
2,4,6-Tribromophenol	6 X		35 - 124	11/18/11 04:12	11/23/11 17:59	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0020	0.00026	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
4,4'-DDE	ND		0.0020	0.00030	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
4,4'-DDT	ND		0.0020	0.00029	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Aldrin	ND		0.0020	0.00035	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
alpha-BHC	ND		0.0020	0.00032	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
beta-BHC	ND		0.0020	0.00051	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
delta-BHC	ND		0.0020	0.00030	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Dieldrin	ND		0.0020	0.00033	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Endosulfan I	ND		0.0020	0.00037	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Endosulfan II	ND		0.0020	0.00034	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Endosulfan sulfate	ND		0.0020	0.00020	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Endrin	ND		0.0020	0.00038	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Diallate	ND		0.039	0.0033	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
gamma-BHC (Lindane)	0.0011	J p	0.0020	0.00034	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
gamma-Chlordane	ND		0.0020	0.00039	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Heptachlor	ND		0.0020	0.00043	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Heptachlor epoxide	ND		0.0020	0.00038	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Methoxychlor	ND		0.0039	0.00041	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Toxaphene	ND		0.079	0.013	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1
Chlordane (technical)	ND		0.020	0.00086	mg/Kg	☼	11/11/11 03:17	11/30/11 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		45 - 130	11/11/11 03:17	11/30/11 16:28	1
Tetrachloro-m-xylene	74		45 - 130	11/11/11 03:17	11/30/11 16:28	1
DCB Decachlorobiphenyl (Surr)	79		45 - 130	11/11/11 03:17	11/30/11 16:28	1
DCB Decachlorobiphenyl (Surr)	90		45 - 130	11/11/11 03:17	11/30/11 16:28	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (6')-11-7-11

Lab Sample ID: 180-5679-1

Date Collected: 11/07/11 09:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 85.3

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0029	mg/Kg	☼	11/11/11 03:17	11/13/11 07:02	1
PCB-1221	ND		0.020	0.0037	mg/Kg	☼	11/11/11 03:17	11/13/11 07:02	1
PCB-1232	ND		0.020	0.0033	mg/Kg	☼	11/11/11 03:17	11/13/11 07:02	1
PCB-1242	ND		0.020	0.0032	mg/Kg	☼	11/11/11 03:17	11/13/11 07:02	1
PCB-1248	ND		0.020	0.0018	mg/Kg	☼	11/11/11 03:17	11/13/11 07:02	1
PCB-1254	0.039		0.020	0.0028	mg/Kg	☼	11/11/11 03:17	11/13/11 07:02	1
PCB-1260	ND		0.020	0.0028	mg/Kg	☼	11/11/11 03:17	11/13/11 07:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		35 - 140	11/11/11 03:17	11/13/11 07:02	1
DCB Decachlorobiphenyl (Surr)	88		35 - 140	11/11/11 03:17	11/13/11 07:02	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.093	0.0064	mg/Kg	☼	11/11/11 03:12	11/18/11 11:53	20
2,4,5-T	ND		0.023	0.0029	mg/Kg	☼	11/11/11 03:12	11/18/11 11:53	20
Silvex (2,4,5-TP)	ND		0.023	0.0025	mg/Kg	☼	11/11/11 03:12	11/18/11 11:53	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	46		42 - 140	11/11/11 03:12	11/18/11 11:29	20
2,4-Dichlorophenylacetic acid	51		42 - 140	11/11/11 03:12	11/18/11 11:53	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.18	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Arsenic	0.51	J	1.1	0.25	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Barium	53	B	22	0.056	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Boron	20	J	22	0.29	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Beryllium	0.98	B	0.45	0.017	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Cadmium	ND		0.56	0.027	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Chromium	1.1		0.56	0.095	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Cobalt	0.17	J	5.6	0.099	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Copper	0.60	J	2.8	0.38	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Lead	0.82		0.33	0.16	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Manganese	580	B	1.7	0.054	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Nickel	0.49	J	4.5	0.43	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Selenium	0.38	J	0.56	0.23	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Silver	ND		0.56	0.065	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Thallium	0.27	J	1.1	0.23	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Vanadium	1.9	J	5.6	0.21	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Zinc	2.7	B	2.2	0.25	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1
Tin	ND		11	0.60	mg/Kg	☼	11/14/11 10:12	11/15/11 18:52	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.039	0.013	mg/Kg	☼	11/17/11 03:16	11/17/11 09:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	1.1		0.013	0.0021	mg/Kg			11/29/11 14:59	1
Cr (VI)	ND		0.47	0.12	mg/Kg	☼	11/23/11 09:29	11/26/11 12:23	1
Percent Moisture	15		0.10	0.10	%			11/09/11 16:14	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (6')-11-7-11

Lab Sample ID: 180-5679-1

Date Collected: 11/07/11 09:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 85.3

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	4.2		0.59	0.12	mg/Kg	☼	11/18/11 13:22	11/19/11 17:27	1
Cyanide, Weak Acid Dissociable	ND		0.60	0.19	mg/Kg	☼	11/16/11 11:49	11/16/11 15:09	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.46	0.12	mg/Kg	☼	11/23/11 09:29	11/28/11 15:10	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61	B	25	5.5	mg/Kg			11/16/11 21:14	2.5
Nitrate as N	0.79	J	1.2	0.37	mg/Kg			11/16/11 21:14	2.5
Nitrite as N	ND		1.2	0.40	mg/Kg			11/16/11 21:14	2.5
Sulfate	6900	B	250	29	mg/Kg			11/17/11 13:06	25

Client Sample ID: B-4 (16')-11-7-11

Lab Sample ID: 180-5679-2

Date Collected: 11/07/11 10:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		21	5.2	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Benzene	ND		5.2	0.71	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Bromodichloromethane	ND		5.2	0.59	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Bromoform	ND		5.2	0.46	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Bromomethane	ND		5.2	0.77	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
2-Butanone (MEK)	ND		5.2	0.92	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Carbon disulfide	ND		5.2	0.53	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Carbon tetrachloride	ND		5.2	0.47	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Chlorobenzene	ND		5.2	0.79	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Chloroethane	ND		5.2	1.6	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Chloroform	ND		5.2	0.61	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Chloromethane	ND		5.2	0.89	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Dibromochloromethane	ND		5.2	0.74	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,1-Dichloroethane	ND		5.2	0.60	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,2-Dichloroethane	ND		5.2	0.64	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,1-Dichloroethene	ND		5.2	0.89	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Acetonitrile	ND		100	24	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,2-Dichloropropane	ND		5.2	0.57	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
cis-1,3-Dichloropropene	ND		5.2	0.71	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
trans-1,3-Dichloropropene	ND		5.2	0.62	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Ethylbenzene	ND		5.2	0.67	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
2-Hexanone	ND		5.2	0.72	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Methylene Chloride	1.8	J B	5.2	0.70	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.2	0.68	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Bromochloromethane	ND		5.2	0.72	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Styrene	ND		5.2	0.74	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,1,1,2,2-Tetrachloroethane	ND		5.2	0.75	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Tetrachloroethene	1.0	J	5.2	0.71	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,1,1-Trichloroethane	ND		5.2	0.51	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,1,2-Trichloroethane	ND		5.2	0.87	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (16')-11-7-11

Lab Sample ID: 180-5679-2

Date Collected: 11/07/11 10:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.2	0.69	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Vinyl chloride	ND		5.2	0.49	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Xylenes, Total	ND		16	2.3	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Cyclohexane	ND		5.2	0.39	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,2-Dibromo-3-Chloropropane	ND		5.2	0.78	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,2-Dibromoethane (EDB)	ND		5.2	0.90	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Dichlorodifluoromethane	ND		5.2	0.70	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
cis-1,2-Dichloroethene	ND		5.2	0.73	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
trans-1,2-Dichloroethene	ND		5.2	0.62	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Isopropylbenzene	ND		5.2	0.71	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Methyl acetate	ND		5.2	0.94	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Methylcyclohexane	ND		5.2	0.76	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Methyl tert-butyl ether	ND		5.2	0.78	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Trichlorofluoromethane	ND		5.2	0.96	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,2-Dichlorobenzene	ND		5.2	0.83	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,3-Dichlorobenzene	ND		5.2	0.69	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,4-Dichlorobenzene	ND		5.2	0.67	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,2,4-Trichlorobenzene	ND		5.2	0.92	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Toluene	ND		5.2	0.76	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
N-Propylbenzene	ND		5.2	0.80	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,2,3-Trichloropropane	ND		5.2	0.97	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,3,5-Trimethylbenzene	ND		5.2	0.70	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
tert-Butylbenzene	ND		5.2	0.74	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
1,2,4-Trimethylbenzene	ND		5.2	0.68	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
sec-Butylbenzene	ND		5.2	0.82	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
n-Butylbenzene	ND		5.2	0.84	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Hexachlorobutadiene	ND		5.2	1.2	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Naphthalene	3.9	J B	5.2	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Acrolein	ND		100	7.4	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Acrylonitrile	ND		100	11	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Methacrylonitrile	ND		5.2	0.31	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Isobutyl alcohol	ND		210	27	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Methyl methacrylate	ND		5.2	0.72	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Ethyl methacrylate	ND		5.2	0.44	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Vinyl acetate	ND		5.2	0.37	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1
Hexane	1.5	J	5.2	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 10:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		52 - 124	11/09/11 05:26	11/09/11 10:24	1
Toluene-d8 (Surr)	102		72 - 127	11/09/11 05:26	11/09/11 10:24	1
4-Bromofluorobenzene (Surr)	97		63 - 120	11/09/11 05:26	11/09/11 10:24	1
Dibromofluoromethane (Surr)	81		68 - 121	11/09/11 05:26	11/09/11 10:24	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.39	0.030	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Acenaphthene	0.026	J	0.079	0.0076	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Acetophenone	ND		0.39	0.033	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Acenaphthylene	ND		0.079	0.0091	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Anthracene	0.026	J	0.079	0.0077	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (16')-11-7-11

Lab Sample ID: 180-5679-2

Date Collected: 11/07/11 10:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 84.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.025	J	0.079	0.0099	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Benzo[a]pyrene	0.022	J	0.079	0.0079	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Benzo[b]fluoranthene	0.023	J	0.079	0.012	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Benzo[g,h,i]perylene	0.017	J	0.079	0.0079	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Benzo[k]fluoranthene	0.022	J	0.079	0.016	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Bis(2-chloroethyl)ether	ND		0.079	0.011	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Bis(2-chloroethoxy)methane	ND		0.39	0.026	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2,2'-oxybis[1-chloropropane]	ND		0.079	0.0085	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Bis(2-ethylhexyl) phthalate	ND		0.79	0.064	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
4-Bromophenyl phenyl ether	ND		0.39	0.034	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Butyl benzyl phthalate	ND		0.39	0.054	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Carbazole	ND		0.079	0.0073	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
4-Chloroaniline	ND		0.39	0.032	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2-Chloronaphthalene	ND		0.079	0.0083	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
4-Chlorophenyl phenyl ether	ND		0.39	0.044	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Chrysene	0.030	J	0.079	0.0094	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Dibenz(a,h)anthracene	ND		0.079	0.0088	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Di-n-butyl phthalate	ND		0.39	0.050	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
3,3'-Dichlorobenzidine	ND		0.39	0.042	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Diethyl phthalate	ND		0.39	0.043	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Dimethyl phthalate	ND		0.39	0.043	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2,4-Dinitrotoluene	ND		0.39	0.032	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2,6-Dinitrotoluene	ND		0.39	0.041	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Di-n-octyl phthalate	ND		0.39	0.042	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Fluoranthene	0.084		0.079	0.0085	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Fluorene	0.071	J	0.079	0.010	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Hexachlorobenzene	ND		0.079	0.0084	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
3,3'-Dimethylbenzidine	ND		2.0	0.021	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Hexachlorobutadiene	ND		0.079	0.0089	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Hexachlorocyclopentadiene	ND		0.39	0.043	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Hexachloroethane	ND		0.39	0.028	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Indeno[1,2,3-cd]pyrene	0.013	J	0.079	0.0082	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Isophorone	ND		0.39	0.030	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2-Methylnaphthalene	0.062	J	0.079	0.0071	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Naphthalene	0.028	J	0.079	0.0068	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2-Nitroaniline	ND		2.0	0.18	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
3-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
4-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Nitrobenzene	ND		0.79	0.033	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
N-Nitrosodi-n-propylamine	ND		0.079	0.0093	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
N-Nitrosodiphenylamine	ND		0.39	0.037	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Phenanthrene	0.18		0.079	0.013	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Pyrene	0.055	J	0.079	0.0080	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
4-Chloro-3-methylphenol	ND		0.39	0.036	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2-Chlorophenol	ND		0.39	0.032	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Aniline	ND		0.39	0.031	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2-Methylphenol	ND		0.39	0.028	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Methylphenol, 3 & 4	ND		0.39	0.039	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2,4-Dichlorophenol	ND		0.079	0.0079	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2,4-Dimethylphenol	ND		0.39	0.062	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (16')-11-7-11

Lab Sample ID: 180-5679-2

Date Collected: 11/07/11 10:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 84.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		2.0	0.47	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
4,6-Dinitro-2-methylphenol	ND		2.0	0.16	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2-Nitrophenol	ND		0.39	0.044	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Benzyl alcohol	ND		0.39	0.048	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
4-Nitrophenol	ND		2.0	0.14	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Pentachlorophenol	ND		0.39	0.035	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Phenol	ND		0.079	0.0094	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2,4,5-Trichlorophenol	ND		0.39	0.042	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
2,4,6-Trichlorophenol	ND		0.39	0.059	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
1,1'-Biphenyl	ND		0.39	0.035	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Caprolactam	ND		2.0	0.30	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Benzaldehyde	ND		0.39	0.059	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Atrazine	ND		0.39	0.039	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Benzoic acid	ND		2.0	0.16	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
Benzidine	ND		7.9	1.7	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
1,4-Dioxane	ND		0.79	0.045	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.39	0.051	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1
o-Toluidine	ND		0.39	0.029	mg/Kg	☼	11/12/11 03:15	11/16/11 16:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	80		25 - 104	11/12/11 03:15	11/16/11 16:54	1
2-Fluorobiphenyl	77		35 - 105	11/12/11 03:15	11/16/11 16:54	1
Terphenyl-d14	65		25 - 127	11/12/11 03:15	11/16/11 16:54	1
Phenol-d5	104		25 - 105	11/12/11 03:15	11/16/11 16:54	1
2-Fluorophenol	86		39 - 103	11/12/11 03:15	11/16/11 16:54	1
2,4,6-Tribromophenol	55		35 - 124	11/12/11 03:15	11/16/11 16:54	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0020	0.00026	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
4,4'-DDE	ND		0.0020	0.00030	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
4,4'-DDT	ND		0.0020	0.00029	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Aldrin	ND		0.0020	0.00035	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
alpha-BHC	ND		0.0020	0.00032	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
beta-BHC	ND		0.0020	0.00051	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
delta-BHC	0.00054	J p	0.0020	0.00030	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Dieldrin	ND		0.0020	0.00033	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Endosulfan I	ND		0.0020	0.00037	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Endosulfan II	ND		0.0020	0.00035	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Endosulfan sulfate	ND		0.0020	0.00020	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Endrin	ND		0.0020	0.00038	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Diallate	ND		0.039	0.0033	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
gamma-BHC (Lindane)	0.0014	J	0.0020	0.00035	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
gamma-Chlordane	ND		0.0020	0.00039	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Heptachlor	ND		0.0020	0.00044	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Heptachlor epoxide	ND		0.0020	0.00038	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Methoxychlor	ND		0.0039	0.00041	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Toxaphene	ND		0.079	0.013	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1
Chlordane (technical)	ND		0.020	0.00087	mg/Kg	☼	11/11/11 03:17	11/30/11 16:47	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (16')-11-7-11

Lab Sample ID: 180-5679-2

Date Collected: 11/07/11 10:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 84.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	60		45 - 130	11/11/11 03:17	11/30/11 16:47	1
Tetrachloro-m-xylene	67		45 - 130	11/11/11 03:17	11/30/11 16:47	1
DCB Decachlorobiphenyl (Surr)	78		45 - 130	11/11/11 03:17	11/30/11 16:47	1
DCB Decachlorobiphenyl (Surr)	89		45 - 130	11/11/11 03:17	11/30/11 16:47	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0029	mg/Kg	✱	11/11/11 03:17	11/13/11 07:30	1
PCB-1221	ND		0.020	0.0037	mg/Kg	✱	11/11/11 03:17	11/13/11 07:30	1
PCB-1232	ND		0.020	0.0034	mg/Kg	✱	11/11/11 03:17	11/13/11 07:30	1
PCB-1242	ND		0.020	0.0032	mg/Kg	✱	11/11/11 03:17	11/13/11 07:30	1
PCB-1248	ND		0.020	0.0019	mg/Kg	✱	11/11/11 03:17	11/13/11 07:30	1
PCB-1254	ND		0.020	0.0028	mg/Kg	✱	11/11/11 03:17	11/13/11 07:30	1
PCB-1260	ND		0.020	0.0028	mg/Kg	✱	11/11/11 03:17	11/13/11 07:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		35 - 140	11/11/11 03:17	11/13/11 07:30	1
DCB Decachlorobiphenyl (Surr)	87		35 - 140	11/11/11 03:17	11/13/11 07:30	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.094	0.0065	mg/Kg	✱	11/11/11 03:12	11/18/11 11:53	20
2,4,5-T	ND		0.024	0.0030	mg/Kg	✱	11/11/11 03:12	11/18/11 11:53	20
Silvex (2,4,5-TP)	ND		0.024	0.0025	mg/Kg	✱	11/11/11 03:12	11/18/11 11:53	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	44		42 - 140	11/11/11 03:12	11/18/11 11:53	20
2,4-Dichlorophenylacetic acid	49		42 - 140	11/11/11 03:12	11/18/11 12:18	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.2	0.19	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Arsenic	1.2		1.2	0.26	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Barium	280	B	24	0.059	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Boron	94		24	0.30	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Beryllium	5.5	B	0.47	0.018	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Cadmium	ND		0.59	0.028	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Chromium	2.3		1.2	0.20	mg/Kg	✱	11/14/11 10:12	11/16/11 12:28	2
Cobalt	ND		5.9	0.11	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Copper	0.81	J	3.0	0.41	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Lead	ND		0.36	0.17	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Manganese	3400	B	3.6	0.11	mg/Kg	✱	11/14/11 10:12	11/16/11 12:28	2
Nickel	ND		4.7	0.46	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Selenium	1.4		1.2	0.49	mg/Kg	✱	11/14/11 10:12	11/16/11 12:28	2
Silver	ND		1.2	0.14	mg/Kg	✱	11/14/11 10:12	11/16/11 12:28	2
Thallium	ND		2.4	0.49	mg/Kg	✱	11/14/11 10:12	11/16/11 12:28	2
Vanadium	5.7	J	5.9	0.22	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Zinc	0.90	J B	2.4	0.26	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1
Tin	1.2	J	12	0.64	mg/Kg	✱	11/14/11 10:12	11/15/11 18:58	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4 (16')-11-7-11

Lab Sample ID: 180-5679-2

Date Collected: 11/07/11 10:30

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 84.3

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.037	0.012	mg/Kg	☼	11/17/11 03:16	11/17/11 10:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	2.3		0.013	0.0021	mg/Kg			11/29/11 14:59	1
Cr (VI)	ND		0.48	0.12	mg/Kg	☼	11/23/11 09:29	11/26/11 12:24	1
Percent Moisture	16		0.10	0.10	%			11/09/11 16:14	1
Cyanide, Total	4.1		0.58	0.12	mg/Kg	☼	11/18/11 13:22	11/19/11 17:27	1
Cyanide, Weak Acid Dissociable	0.20	J	0.60	0.19	mg/Kg	☼	11/16/11 11:52	11/16/11 15:12	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.47	0.12	mg/Kg	☼	11/23/11 09:29	11/28/11 15:11	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71	B	10	2.2	mg/Kg			11/16/11 21:42	1
Nitrate as N	0.45	J	0.51	0.15	mg/Kg			11/16/11 21:42	1
Nitrite as N	ND		0.51	0.16	mg/Kg			11/16/11 21:42	1
Sulfate	3800	B	100	12	mg/Kg			11/16/11 21:56	10

Client Sample ID: B-6 (6')-11-8-11

Lab Sample ID: 180-5679-3

Date Collected: 11/08/11 09:00

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 88.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		23	5.6	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Benzene	ND		5.6	0.76	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Bromodichloromethane	ND		5.6	0.63	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Bromoform	ND		5.6	0.50	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Bromomethane	ND		5.6	0.83	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
2-Butanone (MEK)	ND		5.6	1.0	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Carbon disulfide	ND		5.6	0.58	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Carbon tetrachloride	ND		5.6	0.50	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Chlorobenzene	ND		5.6	0.86	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Chloroethane	ND		5.6	1.7	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Chloroform	ND		5.6	0.66	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Chloromethane	ND		5.6	0.96	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Dibromochloromethane	ND		5.6	0.80	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,1-Dichloroethane	ND		5.6	0.65	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,2-Dichloroethane	ND		5.6	0.69	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,1-Dichloroethene	ND		5.6	0.96	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Acetonitrile	ND		110	26	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,2-Dichloropropane	ND		5.6	0.61	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
cis-1,3-Dichloropropene	ND		5.6	0.77	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
trans-1,3-Dichloropropene	ND		5.6	0.68	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Ethylbenzene	ND		5.6	0.73	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
2-Hexanone	ND		5.6	0.78	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Methylene Chloride	2.8	J B	5.6	0.76	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-6 (6')-11-8-11

Lab Sample ID: 180-5679-3

Date Collected: 11/08/11 09:00

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 88.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.6	0.74	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Bromochloromethane	ND		5.6	0.78	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Styrene	ND		5.6	0.80	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,1,2,2-Tetrachloroethane	ND		5.6	0.81	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Tetrachloroethene	ND		5.6	0.77	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,1,1-Trichloroethane	ND		5.6	0.55	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,1,2-Trichloroethane	ND		5.6	0.94	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Trichloroethene	ND		5.6	0.74	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Vinyl chloride	ND		5.6	0.53	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Xylenes, Total	ND		17	2.5	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Cyclohexane	ND		5.6	0.42	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,2-Dibromo-3-Chloropropane	ND		5.6	0.85	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,2-Dibromoethane (EDB)	ND		5.6	0.97	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Dichlorodifluoromethane	ND		5.6	0.75	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
cis-1,2-Dichloroethene	ND		5.6	0.79	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
trans-1,2-Dichloroethene	ND		5.6	0.67	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Isopropylbenzene	ND		5.6	0.77	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Methyl acetate	ND		5.6	1.0	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Methylcyclohexane	ND		5.6	0.82	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Methyl tert-butyl ether	ND		5.6	0.84	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Trichlorofluoromethane	ND		5.6	1.0	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.6	1.2	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,2-Dichlorobenzene	ND		5.6	0.90	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,3-Dichlorobenzene	ND		5.6	0.74	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,4-Dichlorobenzene	ND		5.6	0.72	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,2,4-Trichlorobenzene	ND		5.6	1.0	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Toluene	ND		5.6	0.82	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
N-Propylbenzene	ND		5.6	0.86	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,2,3-Trichloropropane	ND		5.6	1.0	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,3,5-Trimethylbenzene	ND		5.6	0.75	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
tert-Butylbenzene	ND		5.6	0.80	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
1,2,4-Trimethylbenzene	ND		5.6	0.73	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
sec-Butylbenzene	ND		5.6	0.88	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
n-Butylbenzene	ND		5.6	0.90	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Hexachlorobutadiene	ND		5.6	1.3	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Naphthalene	9.8	B	5.6	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Acrolein	ND		110	8.0	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Acrylonitrile	ND		110	12	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Methacrylonitrile	ND		5.6	0.33	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Isobutyl alcohol	ND		230	30	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Methyl methacrylate	ND		5.6	0.77	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Ethyl methacrylate	ND		5.6	0.48	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Vinyl acetate	ND		5.6	0.40	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Hexane	ND		5.6	1.1	ug/Kg	☼	11/09/11 05:26	11/09/11 10:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		52 - 124				11/09/11 05:26	11/09/11 10:47	1
Toluene-d8 (Surr)	105		72 - 127				11/09/11 05:26	11/09/11 10:47	1
4-Bromofluorobenzene (Surr)	91		63 - 120				11/09/11 05:26	11/09/11 10:47	1
Dibromofluoromethane (Surr)	89		68 - 121				11/09/11 05:26	11/09/11 10:47	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-6 (6')-11-8-11

Lab Sample ID: 180-5679-3

Date Collected: 11/08/11 09:00

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 88.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.74	0.057	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Acenaphthene	2.0		0.15	0.014	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Acetophenone	0.064	J	0.74	0.061	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Acenaphthylene	1.2		0.15	0.017	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Anthracene	4.9		0.15	0.015	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzo[a]anthracene	14		0.15	0.019	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzo[a]pyrene	12		0.15	0.015	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzo[b]fluoranthene	14		0.15	0.023	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzo[g,h,i]perylene	8.5		0.15	0.015	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzo[k]fluoranthene	5.2		0.15	0.030	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Bis(2-chloroethyl)ether	ND		0.15	0.020	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Bis(2-chloroethoxy)methane	ND		0.74	0.049	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2,2'-oxybis[1-chloropropane]	ND		0.15	0.016	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Bis(2-ethylhexyl) phthalate	0.25	J	1.5	0.12	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
4-Bromophenyl phenyl ether	ND		0.74	0.065	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Butyl benzyl phthalate	ND		0.74	0.10	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Carbazole	2.5		0.15	0.014	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
4-Chloroaniline	ND		0.74	0.060	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2-Chloronaphthalene	ND		0.15	0.016	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
4-Chlorophenyl phenyl ether	ND		0.74	0.083	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Chrysene	12		0.15	0.018	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Dibenz(a,h)anthracene	2.4		0.15	0.017	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Di-n-butyl phthalate	ND		0.74	0.094	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
3,3'-Dichlorobenzidine	ND		0.74	0.079	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Diethyl phthalate	ND		0.74	0.082	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Dimethyl phthalate	ND		0.74	0.081	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2,4-Dinitrotoluene	ND		0.74	0.060	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2,6-Dinitrotoluene	ND		0.74	0.077	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Di-n-octyl phthalate	ND		0.74	0.079	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Fluoranthene	18		0.15	0.016	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Fluorene	2.2		0.15	0.020	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Hexachlorobenzene	ND		0.15	0.016	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
3,3'-Dimethylbenzidine	ND		3.8	0.040	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Hexachlorobutadiene	ND		0.15	0.017	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Hexachlorocyclopentadiene	ND		0.74	0.081	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Hexachloroethane	ND		0.74	0.054	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Indeno[1,2,3-cd]pyrene	7.3		0.15	0.015	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Isophorone	ND		0.74	0.056	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2-Methylnaphthalene	1.4		0.15	0.013	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Naphthalene	2.1		0.15	0.013	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2-Nitroaniline	ND		3.8	0.33	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
3-Nitroaniline	ND		3.8	0.31	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
4-Nitroaniline	ND		3.8	0.30	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Nitrobenzene	ND		1.5	0.062	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
N-Nitrosodi-n-propylamine	ND		0.15	0.018	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
N-Nitrosodiphenylamine	ND		0.74	0.069	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Phenanthrene	16		0.15	0.024	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Pyrene	17		0.15	0.015	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
4-Chloro-3-methylphenol	ND		0.74	0.069	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2-Chlorophenol	ND		0.74	0.061	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-6 (6')-11-8-11

Lab Sample ID: 180-5679-3

Date Collected: 11/08/11 09:00

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 88.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		0.74	0.058	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2-Methylphenol	0.13	J	0.74	0.052	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Methylphenol, 3 & 4	0.27	J	0.74	0.073	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2,4-Dichlorophenol	ND		0.15	0.015	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2,4-Dimethylphenol	0.12	J	0.74	0.12	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2,4-Dinitrophenol	ND		3.8	0.89	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
4,6-Dinitro-2-methylphenol	ND		3.8	0.30	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2-Nitrophenol	ND		0.74	0.082	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzyl alcohol	ND		0.74	0.090	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
4-Nitrophenol	ND		3.8	0.27	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Pentachlorophenol	ND		0.74	0.067	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Phenol	0.17		0.15	0.018	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2,4,5-Trichlorophenol	ND		0.74	0.080	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
2,4,6-Trichlorophenol	ND		0.74	0.11	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
1,1'-Biphenyl	0.33	J	0.74	0.067	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Caprolactam	ND		3.8	0.56	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzaldehyde	ND		0.74	0.11	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Atrazine	ND		0.74	0.073	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzoic acid	ND		3.8	0.31	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
Benzidine	ND		15	3.1	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
1,4-Dioxane	ND		1.5	0.086	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.74	0.096	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2
o-Toluidine	ND		0.74	0.056	mg/Kg	☼	11/12/11 03:15	11/14/11 20:18	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		25 - 104	11/12/11 03:15	11/14/11 20:18	2
2-Fluorobiphenyl	73		35 - 105	11/12/11 03:15	11/14/11 20:18	2
Terphenyl-d14	73		25 - 127	11/12/11 03:15	11/14/11 20:18	2
Phenol-d5	81		25 - 105	11/12/11 03:15	11/14/11 20:18	2
2-Fluorophenol	66		39 - 103	11/12/11 03:15	11/14/11 20:18	2
2,4,6-Tribromophenol	41		35 - 124	11/12/11 03:15	11/14/11 20:18	2

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0095	0.0012	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
4,4'-DDE	ND		0.0095	0.0014	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
4,4'-DDT	ND		0.0095	0.0014	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Aldrin	ND		0.0095	0.0017	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
alpha-BHC	ND		0.0095	0.0015	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
beta-BHC	ND		0.0095	0.0024	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
delta-BHC	ND		0.0095	0.0014	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Dieldrin	ND		0.0095	0.0016	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Endosulfan I	ND		0.0095	0.0018	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Endosulfan II	ND		0.0095	0.0016	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Endosulfan sulfate	ND		0.0095	0.00097	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Endrin	ND		0.0095	0.0018	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Diallate	ND		0.18	0.016	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
gamma-BHC (Lindane)	0.10		0.0095	0.0016	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
gamma-Chlordane	ND		0.0095	0.0018	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Heptachlor	ND		0.0095	0.0021	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-6 (6')-11-8-11

Lab Sample ID: 180-5679-3

Date Collected: 11/08/11 09:00

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 88.7

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor epoxide	ND		0.0095	0.0018	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Methoxychlor	ND		0.018	0.0019	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Toxaphene	ND		0.38	0.062	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5
Chlordane (technical)	ND		0.095	0.0041	mg/Kg	☼	11/11/11 03:17	11/30/11 17:06	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		45 - 130	11/11/11 03:17	11/30/11 17:06	5
Tetrachloro-m-xylene	58		45 - 130	11/11/11 03:17	11/30/11 17:06	5
DCB Decachlorobiphenyl (Surr)	310	X	45 - 130	11/11/11 03:17	11/30/11 17:06	5
DCB Decachlorobiphenyl (Surr)	65	p	45 - 130	11/11/11 03:17	11/30/11 17:06	5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0028	mg/Kg	☼	11/11/11 03:17	11/13/11 07:58	1
PCB-1221	ND		0.019	0.0036	mg/Kg	☼	11/11/11 03:17	11/13/11 07:58	1
PCB-1232	ND		0.019	0.0032	mg/Kg	☼	11/11/11 03:17	11/13/11 07:58	1
PCB-1242	ND		0.019	0.0030	mg/Kg	☼	11/11/11 03:17	11/13/11 07:58	1
PCB-1248	ND		0.019	0.0018	mg/Kg	☼	11/11/11 03:17	11/13/11 07:58	1
PCB-1254	0.035		0.019	0.0027	mg/Kg	☼	11/11/11 03:17	11/13/11 07:58	1
PCB-1260	ND		0.019	0.0027	mg/Kg	☼	11/11/11 03:17	11/13/11 07:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		35 - 140	11/11/11 03:17	11/13/11 07:58	1
DCB Decachlorobiphenyl (Surr)	94		35 - 140	11/11/11 03:17	11/13/11 07:58	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.090	0.0062	mg/Kg	☼	11/11/11 03:12	11/18/11 13:31	20
2,4,5-T	ND		0.023	0.0028	mg/Kg	☼	11/11/11 03:12	11/18/11 13:31	20
Silvex (2,4,5-TP)	ND		0.023	0.0024	mg/Kg	☼	11/11/11 03:12	11/18/11 13:31	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	45		42 - 140	11/11/11 03:12	11/18/11 13:07	20
2,4-Dichlorophenylacetic acid	42		42 - 140	11/11/11 03:12	11/18/11 13:31	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.89	J	1.1	0.18	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Arsenic	4.6		1.1	0.25	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Barium	140	B	22	0.056	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Boron	33		22	0.29	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Beryllium	3.5	B	0.45	0.017	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Cadmium	0.75		0.56	0.027	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Chromium	28		0.56	0.095	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Cobalt	3.0	J	5.6	0.099	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Copper	31		2.8	0.38	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Lead	140		0.33	0.16	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Manganese	2000	B	1.7	0.054	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Nickel	17		4.5	0.43	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Selenium	0.81		0.56	0.23	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Silver	ND		0.56	0.065	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Thallium	ND		1.1	0.23	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-6 (6')-11-8-11

Lab Sample ID: 180-5679-3

Date Collected: 11/08/11 09:00

Matrix: Solid

Date Received: 11/08/11 16:09

Percent Solids: 88.7

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	11		5.6	0.21	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Zinc	130	B	2.2	0.25	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1
Tin	2.3	J	11	0.60	mg/Kg	☼	11/14/11 10:28	11/15/11 19:04	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.6		0.035	0.012	mg/Kg	☼	11/17/11 03:16	11/17/11 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	26		0.013	0.0021	mg/Kg			11/29/11 14:59	1
Cr (VI)	2.2		0.45	0.11	mg/Kg	☼	11/23/11 09:29	11/26/11 12:29	1
Percent Moisture	11		0.10	0.10	%			11/09/11 16:14	1
Cyanide, Total	4.6		0.55	0.11	mg/Kg	☼	11/18/11 13:22	11/19/11 17:32	1
Cyanide, Weak Acid Dissociable	0.41	J	0.58	0.19	mg/Kg	☼	11/16/11 11:52	11/16/11 15:12	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	1.9		0.45	0.11	mg/Kg	☼	11/23/11 09:29	11/28/11 15:16	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61	B	10	2.2	mg/Kg			11/16/11 22:10	1
Nitrate as N	5.9		0.50	0.15	mg/Kg			11/16/11 22:10	1
Nitrite as N	0.56		0.50	0.16	mg/Kg			11/16/11 22:10	1
Sulfate	170	B	10	1.2	mg/Kg			11/16/11 22:10	1

Client Sample ID: B-5W-11-8-11

Lab Sample ID: 180-5679-4

Date Collected: 11/08/11 12:30

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		63	31	ug/L			11/21/11 13:58	12.5
Benzene	210		13	1.3	ug/L			11/21/11 13:58	12.5
Bromodichloromethane	ND		13	1.6	ug/L			11/21/11 13:58	12.5
Bromoform	ND		13	2.4	ug/L			11/21/11 13:58	12.5
Bromomethane	ND		13	3.9	ug/L			11/21/11 13:58	12.5
2-Butanone (MEK)	ND		63	6.8	ug/L			11/21/11 13:58	12.5
Carbon disulfide	ND		13	2.7	ug/L			11/21/11 13:58	12.5
Carbon tetrachloride	ND		13	1.7	ug/L			11/21/11 13:58	12.5
Chlorobenzene	ND		13	1.7	ug/L			11/21/11 13:58	12.5
Chloroethane	ND		13	2.7	ug/L			11/21/11 13:58	12.5
Chloroform	ND		13	2.1	ug/L			11/21/11 13:58	12.5
Dibromochloromethane	ND		13	1.7	ug/L			11/21/11 13:58	12.5
1,2-Dibromo-3-Chloropropane	ND		13	1.8	ug/L			11/21/11 13:58	12.5
1,2-Dibromoethane (EDB)	ND		13	2.3	ug/L			11/21/11 13:58	12.5
1,1-Dichloroethane	ND		13	1.5	ug/L			11/21/11 13:58	12.5
1,2-Dichloroethane	ND		13	2.6	ug/L			11/21/11 13:58	12.5
1,1-Dichloroethene	ND		13	3.7	ug/L			11/21/11 13:58	12.5

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5W-11-8-11

Lab Sample ID: 180-5679-4

Date Collected: 11/08/11 12:30

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		13	2.1	ug/L			11/21/11 13:58	12.5
1,2-Dichloropropane	ND		13	1.2	ug/L			11/21/11 13:58	12.5
cis-1,3-Dichloropropene	ND		13	2.3	ug/L			11/21/11 13:58	12.5
trans-1,3-Dichloropropene	ND		13	1.9	ug/L			11/21/11 13:58	12.5
Ethylbenzene	28		13	2.8	ug/L			11/21/11 13:58	12.5
2-Hexanone	ND		63	2.0	ug/L			11/21/11 13:58	12.5
Methylene Chloride	4.2	J	13	1.9	ug/L			11/21/11 13:58	12.5
4-Methyl-2-pentanone (MIBK)	ND		63	6.6	ug/L			11/21/11 13:58	12.5
Styrene	5.6	J	13	1.2	ug/L			11/21/11 13:58	12.5
1,1,2,2-Tetrachloroethane	ND		13	2.5	ug/L			11/21/11 13:58	12.5
Tetrachloroethene	ND		13	1.9	ug/L			11/21/11 13:58	12.5
Toluene	21		13	1.9	ug/L			11/21/11 13:58	12.5
1,1,1-Trichloroethane	ND		13	3.6	ug/L			11/21/11 13:58	12.5
1,1,2-Trichloroethane	ND		13	2.5	ug/L			11/21/11 13:58	12.5
Trichloroethene	ND		13	1.8	ug/L			11/21/11 13:58	12.5
Trichlorofluoromethane	ND		13	2.5	ug/L			11/21/11 13:58	12.5
Vinyl chloride	ND		13	2.8	ug/L			11/21/11 13:58	12.5
Xylenes, Total	43		38	6.1	ug/L			11/21/11 13:58	12.5
Cyclohexane	ND		13	3.2	ug/L			11/21/11 13:58	12.5
cis-1,2-Dichloroethene	ND		13	3.0	ug/L			11/21/11 13:58	12.5
Dichlorodifluoromethane	ND		13	2.4	ug/L			11/21/11 13:58	12.5
Isopropylbenzene	ND		13	2.0	ug/L			11/21/11 13:58	12.5
Methyl acetate	ND		13	1.7	ug/L			11/21/11 13:58	12.5
Methylcyclohexane	ND		13	3.3	ug/L			11/21/11 13:58	12.5
Methyl tert-butyl ether	ND		13	2.3	ug/L			11/21/11 13:58	12.5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		13	4.0	ug/L			11/21/11 13:58	12.5
1,2-Dichlorobenzene	ND		13	1.9	ug/L			11/21/11 13:58	12.5
1,3-Dichlorobenzene	ND		13	1.3	ug/L			11/21/11 13:58	12.5
1,4-Dichlorobenzene	ND		13	2.6	ug/L			11/21/11 13:58	12.5
1,2,4-Trichlorobenzene	ND		13	3.4	ug/L			11/21/11 13:58	12.5
Chloromethane	ND		13	3.5	ug/L			11/21/11 13:58	12.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 135		11/21/11 13:58	12.5
Toluene-d8 (Surr)	90		71 - 118		11/21/11 13:58	12.5
4-Bromofluorobenzene (Surr)	97		70 - 118		11/21/11 13:58	12.5
Dibromofluoromethane (Surr)	94		70 - 128		11/21/11 13:58	12.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.3		0.20	0.014	ug/L		11/11/11 08:11	11/14/11 14:44	1
Acenaphthylene	3.2		0.20	0.015	ug/L		11/11/11 08:11	11/14/11 14:44	1
Acetophenone	0.99		0.98	0.078	ug/L		11/11/11 08:11	11/14/11 14:44	1
Anthracene	0.20		0.20	0.15	ug/L		11/11/11 08:11	11/14/11 14:44	1
Atrazine	ND		0.98	0.087	ug/L		11/11/11 08:11	11/14/11 14:44	1
Benzaldehyde	ND	*	0.98	0.15	ug/L		11/11/11 08:11	11/14/11 14:44	1
Benzo[a]anthracene	0.26		0.20	0.014	ug/L		11/11/11 08:11	11/14/11 14:44	1
Benzo[b]fluoranthene	0.22		0.20	0.015	ug/L		11/11/11 08:11	11/14/11 14:44	1
Benzo[k]fluoranthene	0.25		0.20	0.054	ug/L		11/11/11 08:11	11/14/11 14:44	1
Benzo[g,h,i]perylene	0.23		0.20	0.015	ug/L		11/11/11 08:11	11/14/11 14:44	1
Benzo[a]pyrene	0.13	J	0.20	0.013	ug/L		11/11/11 08:11	11/14/11 14:44	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5W-11-8-11

Lab Sample ID: 180-5679-4

Date Collected: 11/08/11 12:30

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		0.98	0.057	ug/L		11/11/11 08:11	11/14/11 14:44	1
Bis(2-chloroethyl)ether	ND		0.20	0.025	ug/L		11/11/11 08:11	11/14/11 14:44	1
Bis(2-ethylhexyl) phthalate	ND		2.0	1.2	ug/L		11/11/11 08:11	11/14/11 14:44	1
Butyl benzyl phthalate	ND		0.98	0.14	ug/L		11/11/11 08:11	11/14/11 14:44	1
1,1'-Biphenyl	1.7		0.98	0.041	ug/L		11/11/11 08:11	11/14/11 14:44	1
Caprolactam	ND		4.9	1.2	ug/L		11/11/11 08:11	11/14/11 14:44	1
Carbazole	4.6		0.20	0.015	ug/L		11/11/11 08:11	11/14/11 14:44	1
Chrysene	0.27		0.20	0.014	ug/L		11/11/11 08:11	11/14/11 14:44	1
2-Chloronaphthalene	ND		0.20	0.015	ug/L		11/11/11 08:11	11/14/11 14:44	1
2-Chlorophenol	ND		0.98	0.16	ug/L		11/11/11 08:11	11/14/11 14:44	1
2,4-Dichlorophenol	ND		0.20	0.033	ug/L		11/11/11 08:11	11/14/11 14:44	1
2,4-Dimethylphenol	5.5		0.98	0.084	ug/L		11/11/11 08:11	11/14/11 14:44	1
2,4-Dinitrophenol	ND		4.9	0.60	ug/L		11/11/11 08:11	11/14/11 14:44	1
2,4-Dinitrotoluene	ND		0.98	0.053	ug/L		11/11/11 08:11	11/14/11 14:44	1
2,6-Dinitrotoluene	ND		0.98	0.078	ug/L		11/11/11 08:11	11/14/11 14:44	1
2-Methylnaphthalene	17		0.20	0.012	ug/L		11/11/11 08:11	11/14/11 14:44	1
2-Methylphenol	5.8		0.98	0.085	ug/L		11/11/11 08:11	11/14/11 14:44	1
2-Nitroaniline	ND		4.9	0.34	ug/L		11/11/11 08:11	11/14/11 14:44	1
2-Nitrophenol	ND		0.98	0.17	ug/L		11/11/11 08:11	11/14/11 14:44	1
2,2'-oxybis[1-chloropropane]	ND		0.20	0.019	ug/L		11/11/11 08:11	11/14/11 14:44	1
2,4,5-Trichlorophenol	ND		0.98	0.15	ug/L		11/11/11 08:11	11/14/11 14:44	1
2,4,6-Trichlorophenol	ND		0.98	0.17	ug/L		11/11/11 08:11	11/14/11 14:44	1
4-Nitroaniline	ND		4.9	0.17	ug/L		11/11/11 08:11	11/14/11 14:44	1
4-Nitrophenol	ND		4.9	0.63	ug/L		11/11/11 08:11	11/14/11 14:44	1
4-Chlorophenyl phenyl ether	ND		0.98	0.049	ug/L		11/11/11 08:11	11/14/11 14:44	1
Methylphenol, 3 & 4	11		0.98	0.088	ug/L		11/11/11 08:11	11/14/11 14:44	1
4,6-Dinitro-2-methylphenol	ND		4.9	0.22	ug/L		11/11/11 08:11	11/14/11 14:44	1
4-Chloroaniline	ND		0.98	0.087	ug/L		11/11/11 08:11	11/14/11 14:44	1
4-Chloro-3-methylphenol	ND		0.98	0.074	ug/L		11/11/11 08:11	11/14/11 14:44	1
4-Bromophenyl phenyl ether	ND		0.98	0.062	ug/L		11/11/11 08:11	11/14/11 14:44	1
Dibenz(a,h)anthracene	0.30		0.20	0.015	ug/L		11/11/11 08:11	11/14/11 14:44	1
Dibenzofuran	2.0		0.98	0.060	ug/L		11/11/11 08:11	11/14/11 14:44	1
Di-n-butyl phthalate	ND		0.98	0.12	ug/L		11/11/11 08:11	11/14/11 14:44	1
Diethyl phthalate	ND		0.98	0.14	ug/L		11/11/11 08:11	11/14/11 14:44	1
Dimethyl phthalate	ND		0.98	0.075	ug/L		11/11/11 08:11	11/14/11 14:44	1
Di-n-octyl phthalate	ND		0.98	0.20	ug/L		11/11/11 08:11	11/14/11 14:44	1
3,3'-Dichlorobenzidine	ND		0.98	0.11	ug/L		11/11/11 08:11	11/14/11 14:44	1
3-Nitroaniline	ND		4.9	0.32	ug/L		11/11/11 08:11	11/14/11 14:44	1
Fluoranthene	0.24		0.20	0.016	ug/L		11/11/11 08:11	11/14/11 14:44	1
Fluorene	0.86		0.20	0.021	ug/L		11/11/11 08:11	11/14/11 14:44	1
Hexachlorobenzene	ND		0.20	0.018	ug/L		11/11/11 08:11	11/14/11 14:44	1
Hexachlorobutadiene	ND		0.20	0.016	ug/L		11/11/11 08:11	11/14/11 14:44	1
Hexachlorocyclopentadiene	ND		0.98	0.051	ug/L		11/11/11 08:11	11/14/11 14:44	1
Hexachloroethane	ND		0.98	0.062	ug/L		11/11/11 08:11	11/14/11 14:44	1
Indeno[1,2,3-cd]pyrene	0.24		0.20	0.020	ug/L		11/11/11 08:11	11/14/11 14:44	1
Isophorone	ND		0.98	0.063	ug/L		11/11/11 08:11	11/14/11 14:44	1
Naphthalene	120 E		0.20	0.014	ug/L		11/11/11 08:11	11/14/11 14:44	1
Nitrobenzene	ND		2.0	0.083	ug/L		11/11/11 08:11	11/14/11 14:44	1
N-Nitrosodiphenylamine	ND		0.98	0.084	ug/L		11/11/11 08:11	11/14/11 14:44	1
N-Nitrosodi-n-propylamine	ND		0.20	0.030	ug/L		11/11/11 08:11	11/14/11 14:44	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5W-11-8-11

Lab Sample ID: 180-5679-4

Date Collected: 11/08/11 12:30

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.14	J	0.20	0.015	ug/L		11/11/11 08:11	11/14/11 14:44	1
Phenol	9.9		0.20	0.057	ug/L		11/11/11 08:11	11/14/11 14:44	1
Phenanthrene	3.0		0.20	0.042	ug/L		11/11/11 08:11	11/14/11 14:44	1
Pentachlorophenol	ND		0.98	0.065	ug/L		11/11/11 08:11	11/14/11 14:44	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		16 - 122				11/11/11 08:11	11/14/11 14:44	1
2-Fluorobiphenyl	47		19 - 107				11/11/11 08:11	11/14/11 14:44	1
2-Fluorophenol	48		10 - 111				11/11/11 08:11	11/14/11 14:44	1
Nitrobenzene-d5	51		23 - 112				11/11/11 08:11	11/14/11 14:44	1
Phenol-d5	53		15 - 112				11/11/11 08:11	11/14/11 14:44	1
Terphenyl-d14	65		10 - 132				11/11/11 08:11	11/14/11 14:44	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.1	J	4.9	0.35	ug/L		11/11/11 08:11	11/15/11 13:52	25
Acenaphthylene	2.9	J	4.9	0.37	ug/L		11/11/11 08:11	11/15/11 13:52	25
Acetophenone	ND		25	2.0	ug/L		11/11/11 08:11	11/15/11 13:52	25
Anthracene	ND		4.9	3.7	ug/L		11/11/11 08:11	11/15/11 13:52	25
Atrazine	ND		25	2.2	ug/L		11/11/11 08:11	11/15/11 13:52	25
Benzaldehyde	ND *		25	3.7	ug/L		11/11/11 08:11	11/15/11 13:52	25
Benzo[a]anthracene	ND		4.9	0.36	ug/L		11/11/11 08:11	11/15/11 13:52	25
Benzo[b]fluoranthene	ND		4.9	0.38	ug/L		11/11/11 08:11	11/15/11 13:52	25
Benzo[k]fluoranthene	ND		4.9	1.3	ug/L		11/11/11 08:11	11/15/11 13:52	25
Benzo[g,h,i]perylene	ND		4.9	0.37	ug/L		11/11/11 08:11	11/15/11 13:52	25
Benzo[a]pyrene	ND		4.9	0.33	ug/L		11/11/11 08:11	11/15/11 13:52	25
Bis(2-chloroethoxy)methane	ND		25	1.4	ug/L		11/11/11 08:11	11/15/11 13:52	25
Bis(2-chloroethyl)ether	ND		4.9	0.62	ug/L		11/11/11 08:11	11/15/11 13:52	25
Bis(2-ethylhexyl) phthalate	ND		49	31	ug/L		11/11/11 08:11	11/15/11 13:52	25
Butyl benzyl phthalate	ND		25	3.5	ug/L		11/11/11 08:11	11/15/11 13:52	25
1,1'-Biphenyl	1.5	J	25	1.0	ug/L		11/11/11 08:11	11/15/11 13:52	25
Caprolactam	ND		120	29	ug/L		11/11/11 08:11	11/15/11 13:52	25
Carbazole	4.1	J	4.9	0.39	ug/L		11/11/11 08:11	11/15/11 13:52	25
Chrysene	ND		4.9	0.34	ug/L		11/11/11 08:11	11/15/11 13:52	25
2-Chloronaphthalene	ND		4.9	0.37	ug/L		11/11/11 08:11	11/15/11 13:52	25
2-Chlorophenol	ND		25	4.0	ug/L		11/11/11 08:11	11/15/11 13:52	25
2,4-Dichlorophenol	ND		4.9	0.82	ug/L		11/11/11 08:11	11/15/11 13:52	25
2,4-Dimethylphenol	3.7	J	25	2.1	ug/L		11/11/11 08:11	11/15/11 13:52	25
2,4-Dinitrophenol	ND		120	15	ug/L		11/11/11 08:11	11/15/11 13:52	25
2,4-Dinitrotoluene	ND		25	1.3	ug/L		11/11/11 08:11	11/15/11 13:52	25
2,6-Dinitrotoluene	ND		25	2.0	ug/L		11/11/11 08:11	11/15/11 13:52	25
2-Methylnaphthalene	15		4.9	0.30	ug/L		11/11/11 08:11	11/15/11 13:52	25
2-Methylphenol	6.5	J	25	2.1	ug/L		11/11/11 08:11	11/15/11 13:52	25
2-Nitroaniline	ND		120	8.6	ug/L		11/11/11 08:11	11/15/11 13:52	25
2-Nitrophenol	ND		25	4.2	ug/L		11/11/11 08:11	11/15/11 13:52	25
2,2'-oxybis[1-chloropropane]	ND		4.9	0.48	ug/L		11/11/11 08:11	11/15/11 13:52	25
2,4,5-Trichlorophenol	ND		25	3.7	ug/L		11/11/11 08:11	11/15/11 13:52	25
2,4,6-Trichlorophenol	ND		25	4.3	ug/L		11/11/11 08:11	11/15/11 13:52	25
4-Nitroaniline	ND		120	4.2	ug/L		11/11/11 08:11	11/15/11 13:52	25
4-Nitrophenol	ND		120	16	ug/L		11/11/11 08:11	11/15/11 13:52	25
4-Chlorophenyl phenyl ether	ND		25	1.2	ug/L		11/11/11 08:11	11/15/11 13:52	25

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5W-11-8-11

Lab Sample ID: 180-5679-4

Date Collected: 11/08/11 12:30

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylphenol, 3 & 4	8.8	J	25	2.2	ug/L		11/11/11 08:11	11/15/11 13:52	25
4,6-Dinitro-2-methylphenol	ND		120	5.4	ug/L		11/11/11 08:11	11/15/11 13:52	25
4-Chloroaniline	ND		25	2.2	ug/L		11/11/11 08:11	11/15/11 13:52	25
4-Chloro-3-methylphenol	ND		25	1.8	ug/L		11/11/11 08:11	11/15/11 13:52	25
4-Bromophenyl phenyl ether	ND		25	1.6	ug/L		11/11/11 08:11	11/15/11 13:52	25
Dibenz(a,h)anthracene	ND		4.9	0.38	ug/L		11/11/11 08:11	11/15/11 13:52	25
Dibenzofuran	2.2	J	25	1.5	ug/L		11/11/11 08:11	11/15/11 13:52	25
Di-n-butyl phthalate	ND		25	3.1	ug/L		11/11/11 08:11	11/15/11 13:52	25
Diethyl phthalate	ND		25	3.6	ug/L		11/11/11 08:11	11/15/11 13:52	25
Dimethyl phthalate	ND		25	1.9	ug/L		11/11/11 08:11	11/15/11 13:52	25
Di-n-octyl phthalate	ND		25	5.1	ug/L		11/11/11 08:11	11/15/11 13:52	25
3,3'-Dichlorobenzidine	ND		25	2.7	ug/L		11/11/11 08:11	11/15/11 13:52	25
3-Nitroaniline	ND		120	7.9	ug/L		11/11/11 08:11	11/15/11 13:52	25
Fluoranthene	ND		4.9	0.40	ug/L		11/11/11 08:11	11/15/11 13:52	25
Fluorene	0.88	J	4.9	0.53	ug/L		11/11/11 08:11	11/15/11 13:52	25
Hexachlorobenzene	ND		4.9	0.45	ug/L		11/11/11 08:11	11/15/11 13:52	25
Hexachlorobutadiene	ND		4.9	0.41	ug/L		11/11/11 08:11	11/15/11 13:52	25
Hexachlorocyclopentadiene	ND		25	1.3	ug/L		11/11/11 08:11	11/15/11 13:52	25
Hexachloroethane	ND		25	1.5	ug/L		11/11/11 08:11	11/15/11 13:52	25
Indeno[1,2,3-cd]pyrene	ND		4.9	0.49	ug/L		11/11/11 08:11	11/15/11 13:52	25
Isophorone	ND		25	1.6	ug/L		11/11/11 08:11	11/15/11 13:52	25
Naphthalene	250		4.9	0.34	ug/L		11/11/11 08:11	11/15/11 13:52	25
Nitrobenzene	ND		49	2.1	ug/L		11/11/11 08:11	11/15/11 13:52	25
N-Nitrosodiphenylamine	ND		25	2.1	ug/L		11/11/11 08:11	11/15/11 13:52	25
N-Nitrosodi-n-propylamine	ND		4.9	0.75	ug/L		11/11/11 08:11	11/15/11 13:52	25
Pyrene	ND		4.9	0.38	ug/L		11/11/11 08:11	11/15/11 13:52	25
Phenol	8.6		4.9	1.4	ug/L		11/11/11 08:11	11/15/11 13:52	25
Phenanthrene	2.7	J	4.9	1.0	ug/L		11/11/11 08:11	11/15/11 13:52	25
Pentachlorophenol	ND		25	1.6	ug/L		11/11/11 08:11	11/15/11 13:52	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	52	D	16 - 122	11/11/11 08:11	11/15/11 13:52	25
2-Fluorobiphenyl	44	D	19 - 107	11/11/11 08:11	11/15/11 13:52	25
2-Fluorophenol	36	D	10 - 111	11/11/11 08:11	11/15/11 13:52	25
Nitrobenzene-d5	40	D	23 - 112	11/11/11 08:11	11/15/11 13:52	25
Phenol-d5	44	D	15 - 112	11/11/11 08:11	11/15/11 13:52	25
Terphenyl-d14	59	D	10 - 132	11/11/11 08:11	11/15/11 13:52	25

Method: 6010B - Lead

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	500		200	9.7	ug/L		11/09/11 16:47	11/10/11 17:26	1
Antimony	1.8	J	10	1.3	ug/L		11/09/11 16:47	11/10/11 17:26	1
Arsenic	6.1	J	10	2.7	ug/L		11/09/11 16:47	11/10/11 17:26	1
Barium	91	J	200	0.62	ug/L		11/09/11 16:47	11/10/11 17:26	1
Boron	41	J	200	1.3	ug/L		11/09/11 16:47	11/10/11 17:26	1
Beryllium	ND		4.0	0.23	ug/L		11/09/11 16:47	11/10/11 17:26	1
Cadmium	ND		5.0	0.13	ug/L		11/09/11 16:47	11/10/11 17:26	1
Calcium	240000		5000	9.7	ug/L		11/09/11 16:47	11/10/11 17:26	1
Chromium	ND		5.0	0.57	ug/L		11/09/11 16:47	11/10/11 17:26	1
Cobalt	ND		50	0.40	ug/L		11/09/11 16:47	11/10/11 17:26	1
Copper	ND		25	2.7	ug/L		11/09/11 16:47	11/10/11 17:26	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-5W-11-8-11

Lab Sample ID: 180-5679-4

Date Collected: 11/08/11 12:30

Matrix: Water

Date Received: 11/08/11 16:09

Method: 6010B - Lead (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	280		100	12	ug/L		11/09/11 16:47	11/10/11 17:26	1
Lead	ND		3.0	1.3	ug/L		11/09/11 16:47	11/10/11 17:26	1
Magnesium	ND		5000	21	ug/L		11/09/11 16:47	11/10/11 17:26	1
Manganese	ND		15	0.68	ug/L		11/09/11 16:47	11/10/11 17:26	1
Nickel	ND		40	1.6	ug/L		11/09/11 16:47	11/10/11 17:26	1
Potassium	36000		5000	750	ug/L		11/09/11 16:47	11/10/11 17:26	1
Selenium	14		5.0	3.0	ug/L		11/09/11 16:47	11/10/11 17:26	1
Silver	ND		5.0	0.68	ug/L		11/09/11 16:47	11/10/11 17:26	1
Sodium	200000		5000	220	ug/L		11/09/11 16:47	11/10/11 17:26	1
Thallium	2.5	J	10	2.4	ug/L		11/09/11 16:47	11/10/11 17:26	1
Vanadium	5.0	J	50	1.9	ug/L		11/09/11 16:47	11/10/11 17:26	1
Zinc	5.8	J B	20	2.5	ug/L		11/09/11 16:47	11/10/11 17:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J	0.20	0.038	ug/L		11/21/11 07:20	11/22/11 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	3.2	J	4.8	1.4	mg/L		11/15/11 11:49	11/16/11 11:24	1
Ammonia, distilled	15	B	1.0	0.33	mg/L		11/09/11 16:00	11/10/11 14:54	10
Chemical Oxygen Demand	43		10	3.9	mg/L			11/09/11 16:59	1
Cyanide, Total	54		10	1.5	ug/L		11/11/11 12:00	11/14/11 09:16	1
pH	11.8	HF	0.100	0.100	SU			11/09/11 07:54	1
Total Suspended Solids	ND		4.0	2.0	mg/L			11/09/11 14:15	1

Client Sample ID: B-4W-11-8-11

Lab Sample ID: 180-5679-5

Date Collected: 11/08/11 14:00

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		100	50	ug/L			11/21/11 14:22	20
Benzene	320		20	2.1	ug/L			11/21/11 14:22	20
Bromodichloromethane	ND		20	2.6	ug/L			11/21/11 14:22	20
Bromoform	ND		20	3.8	ug/L			11/21/11 14:22	20
Bromomethane	ND		20	6.3	ug/L			11/21/11 14:22	20
2-Butanone (MEK)	ND		100	11	ug/L			11/21/11 14:22	20
Carbon disulfide	ND		20	4.2	ug/L			11/21/11 14:22	20
Carbon tetrachloride	ND		20	2.7	ug/L			11/21/11 14:22	20
Chlorobenzene	ND		20	2.7	ug/L			11/21/11 14:22	20
Chloroethane	ND		20	4.3	ug/L			11/21/11 14:22	20
Chloroform	ND		20	3.4	ug/L			11/21/11 14:22	20
Dibromochloromethane	ND		20	2.7	ug/L			11/21/11 14:22	20
1,2-Dibromo-3-Chloropropane	ND		20	2.8	ug/L			11/21/11 14:22	20
1,2-Dibromoethane (EDB)	ND		20	3.6	ug/L			11/21/11 14:22	20
1,1-Dichloroethane	ND		20	2.3	ug/L			11/21/11 14:22	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/21/11 14:22	20
1,1-Dichloroethene	ND		20	5.9	ug/L			11/21/11 14:22	20
trans-1,2-Dichloroethene	ND		20	3.4	ug/L			11/21/11 14:22	20

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4W-11-8-11

Lab Sample ID: 180-5679-5

Date Collected: 11/08/11 14:00

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		20	1.9	ug/L			11/21/11 14:22	20
cis-1,3-Dichloropropene	ND		20	3.7	ug/L			11/21/11 14:22	20
trans-1,3-Dichloropropene	ND		20	3.0	ug/L			11/21/11 14:22	20
Ethylbenzene	31		20	4.5	ug/L			11/21/11 14:22	20
2-Hexanone	ND		100	3.2	ug/L			11/21/11 14:22	20
Methylene Chloride	7.8	J	20	3.0	ug/L			11/21/11 14:22	20
4-Methyl-2-pentanone (MIBK)	ND		100	11	ug/L			11/21/11 14:22	20
Styrene	17	J	20	1.9	ug/L			11/21/11 14:22	20
1,1,2,2-Tetrachloroethane	ND		20	4.0	ug/L			11/21/11 14:22	20
Tetrachloroethene	ND		20	3.0	ug/L			11/21/11 14:22	20
Toluene	47		20	3.0	ug/L			11/21/11 14:22	20
1,1,1-Trichloroethane	ND		20	5.7	ug/L			11/21/11 14:22	20
1,1,2-Trichloroethane	ND		20	4.0	ug/L			11/21/11 14:22	20
Trichloroethene	ND		20	2.9	ug/L			11/21/11 14:22	20
Trichlorofluoromethane	ND		20	4.0	ug/L			11/21/11 14:22	20
Vinyl chloride	ND		20	4.5	ug/L			11/21/11 14:22	20
Xylenes, Total	61		60	9.8	ug/L			11/21/11 14:22	20
Cyclohexane	ND		20	5.1	ug/L			11/21/11 14:22	20
cis-1,2-Dichloroethene	ND		20	4.7	ug/L			11/21/11 14:22	20
Dichlorodifluoromethane	ND		20	3.9	ug/L			11/21/11 14:22	20
Isopropylbenzene	ND		20	3.3	ug/L			11/21/11 14:22	20
Methyl acetate	ND		20	2.8	ug/L			11/21/11 14:22	20
Methylcyclohexane	ND		20	5.2	ug/L			11/21/11 14:22	20
Methyl tert-butyl ether	ND		20	3.7	ug/L			11/21/11 14:22	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.4	ug/L			11/21/11 14:22	20
1,2-Dichlorobenzene	ND		20	3.0	ug/L			11/21/11 14:22	20
1,3-Dichlorobenzene	ND		20	2.1	ug/L			11/21/11 14:22	20
1,4-Dichlorobenzene	ND		20	4.1	ug/L			11/21/11 14:22	20
1,2,4-Trichlorobenzene	ND		20	5.4	ug/L			11/21/11 14:22	20
Chloromethane	ND		20	5.7	ug/L			11/21/11 14:22	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		64 - 135		11/21/11 14:22	20
Toluene-d8 (Surr)	88		71 - 118		11/21/11 14:22	20
4-Bromofluorobenzene (Surr)	96		70 - 118		11/21/11 14:22	20
Dibromofluoromethane (Surr)	92		70 - 128		11/21/11 14:22	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.1		0.19	0.014	ug/L		11/11/11 08:11	11/14/11 15:07	1
Acenaphthylene	4.5		0.19	0.015	ug/L		11/11/11 08:11	11/14/11 15:07	1
Acetophenone	1.7		0.96	0.077	ug/L		11/11/11 08:11	11/14/11 15:07	1
Anthracene	0.29		0.19	0.15	ug/L		11/11/11 08:11	11/14/11 15:07	1
Atrazine	ND		0.96	0.086	ug/L		11/11/11 08:11	11/14/11 15:07	1
Benzaldehyde	ND	*	0.96	0.14	ug/L		11/11/11 08:11	11/14/11 15:07	1
Benzo[a]anthracene	ND		0.19	0.014	ug/L		11/11/11 08:11	11/14/11 15:07	1
Benzo[b]fluoranthene	ND		0.19	0.015	ug/L		11/11/11 08:11	11/14/11 15:07	1
Benzo[k]fluoranthene	ND		0.19	0.053	ug/L		11/11/11 08:11	11/14/11 15:07	1
Benzo[g,h,i]perylene	ND		0.19	0.015	ug/L		11/11/11 08:11	11/14/11 15:07	1
Benzo[a]pyrene	ND		0.19	0.013	ug/L		11/11/11 08:11	11/14/11 15:07	1
Bis(2-chloroethoxy)methane	ND		0.96	0.056	ug/L		11/11/11 08:11	11/14/11 15:07	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4W-11-8-11

Lab Sample ID: 180-5679-5

Date Collected: 11/08/11 14:00

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		0.19	0.024	ug/L		11/11/11 08:11	11/14/11 15:07	1
Bis(2-ethylhexyl) phthalate	ND		1.9	1.2	ug/L		11/11/11 08:11	11/14/11 15:07	1
Butyl benzyl phthalate	ND		0.96	0.14	ug/L		11/11/11 08:11	11/14/11 15:07	1
1,1'-Biphenyl	1.9		0.96	0.040	ug/L		11/11/11 08:11	11/14/11 15:07	1
Caprolactam	ND		4.8	1.1	ug/L		11/11/11 08:11	11/14/11 15:07	1
Carbazole	7.5		0.19	0.015	ug/L		11/11/11 08:11	11/14/11 15:07	1
Chrysene	ND		0.19	0.013	ug/L		11/11/11 08:11	11/14/11 15:07	1
2-Chloronaphthalene	ND		0.19	0.015	ug/L		11/11/11 08:11	11/14/11 15:07	1
2-Chlorophenol	ND		0.96	0.16	ug/L		11/11/11 08:11	11/14/11 15:07	1
2,4-Dichlorophenol	ND		0.19	0.032	ug/L		11/11/11 08:11	11/14/11 15:07	1
2,4-Dimethylphenol	9.6		0.96	0.082	ug/L		11/11/11 08:11	11/14/11 15:07	1
2,4-Dinitrophenol	ND		4.8	0.59	ug/L		11/11/11 08:11	11/14/11 15:07	1
2,4-Dinitrotoluene	ND		0.96	0.052	ug/L		11/11/11 08:11	11/14/11 15:07	1
2,6-Dinitrotoluene	ND		0.96	0.077	ug/L		11/11/11 08:11	11/14/11 15:07	1
2-Methylnaphthalene	24		0.19	0.012	ug/L		11/11/11 08:11	11/14/11 15:07	1
2-Methylphenol	4.9		0.96	0.083	ug/L		11/11/11 08:11	11/14/11 15:07	1
2-Nitroaniline	ND		4.8	0.34	ug/L		11/11/11 08:11	11/14/11 15:07	1
2-Nitrophenol	ND		0.96	0.16	ug/L		11/11/11 08:11	11/14/11 15:07	1
2,2'-oxybis[1-chloropropane]	ND		0.19	0.019	ug/L		11/11/11 08:11	11/14/11 15:07	1
2,4,5-Trichlorophenol	ND		0.96	0.15	ug/L		11/11/11 08:11	11/14/11 15:07	1
2,4,6-Trichlorophenol	ND		0.96	0.17	ug/L		11/11/11 08:11	11/14/11 15:07	1
4-Nitroaniline	ND		4.8	0.17	ug/L		11/11/11 08:11	11/14/11 15:07	1
4-Nitrophenol	ND		4.8	0.62	ug/L		11/11/11 08:11	11/14/11 15:07	1
4-Chlorophenyl phenyl ether	ND		0.96	0.048	ug/L		11/11/11 08:11	11/14/11 15:07	1
Methylphenol, 3 & 4	9.1		0.96	0.087	ug/L		11/11/11 08:11	11/14/11 15:07	1
4,6-Dinitro-2-methylphenol	ND		4.8	0.21	ug/L		11/11/11 08:11	11/14/11 15:07	1
4-Chloroaniline	ND		0.96	0.085	ug/L		11/11/11 08:11	11/14/11 15:07	1
4-Chloro-3-methylphenol	ND		0.96	0.073	ug/L		11/11/11 08:11	11/14/11 15:07	1
4-Bromophenyl phenyl ether	ND		0.96	0.061	ug/L		11/11/11 08:11	11/14/11 15:07	1
Dibenz(a,h)anthracene	ND		0.19	0.015	ug/L		11/11/11 08:11	11/14/11 15:07	1
Dibenzofuran	2.3		0.96	0.059	ug/L		11/11/11 08:11	11/14/11 15:07	1
Di-n-butyl phthalate	ND		0.96	0.12	ug/L		11/11/11 08:11	11/14/11 15:07	1
Diethyl phthalate	ND		0.96	0.14	ug/L		11/11/11 08:11	11/14/11 15:07	1
Dimethyl phthalate	ND		0.96	0.074	ug/L		11/11/11 08:11	11/14/11 15:07	1
Di-n-octyl phthalate	ND		0.96	0.20	ug/L		11/11/11 08:11	11/14/11 15:07	1
3,3'-Dichlorobenzidine	ND		0.96	0.11	ug/L		11/11/11 08:11	11/14/11 15:07	1
3-Nitroaniline	ND		4.8	0.31	ug/L		11/11/11 08:11	11/14/11 15:07	1
Fluoranthene	0.23		0.19	0.016	ug/L		11/11/11 08:11	11/14/11 15:07	1
Fluorene	1.0		0.19	0.021	ug/L		11/11/11 08:11	11/14/11 15:07	1
Hexachlorobenzene	ND		0.19	0.018	ug/L		11/11/11 08:11	11/14/11 15:07	1
Hexachlorobutadiene	ND		0.19	0.016	ug/L		11/11/11 08:11	11/14/11 15:07	1
Hexachlorocyclopentadiene	ND		0.96	0.050	ug/L		11/11/11 08:11	11/14/11 15:07	1
Hexachloroethane	ND		0.96	0.060	ug/L		11/11/11 08:11	11/14/11 15:07	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.019	ug/L		11/11/11 08:11	11/14/11 15:07	1
Isophorone	ND		0.96	0.062	ug/L		11/11/11 08:11	11/14/11 15:07	1
Naphthalene	180 E		0.19	0.013	ug/L		11/11/11 08:11	11/14/11 15:07	1
Nitrobenzene	ND		1.9	0.081	ug/L		11/11/11 08:11	11/14/11 15:07	1
N-Nitrosodiphenylamine	ND		0.96	0.082	ug/L		11/11/11 08:11	11/14/11 15:07	1
N-Nitrosodi-n-propylamine	ND		0.19	0.030	ug/L		11/11/11 08:11	11/14/11 15:07	1
Pyrene	0.16 J		0.19	0.015	ug/L		11/11/11 08:11	11/14/11 15:07	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4W-11-8-11

Lab Sample ID: 180-5679-5

Date Collected: 11/08/11 14:00

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	8.4		0.19	0.056	ug/L		11/11/11 08:11	11/14/11 15:07	1
Phenanthrene	3.5		0.19	0.041	ug/L		11/11/11 08:11	11/14/11 15:07	1
Pentachlorophenol	ND		0.96	0.064	ug/L		11/11/11 08:11	11/14/11 15:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		16 - 122				11/11/11 08:11	11/14/11 15:07	1
2-Fluorobiphenyl	67		19 - 107				11/11/11 08:11	11/14/11 15:07	1
2-Fluorophenol	71		10 - 111				11/11/11 08:11	11/14/11 15:07	1
Nitrobenzene-d5	82		23 - 112				11/11/11 08:11	11/14/11 15:07	1
Phenol-d5	72		15 - 112				11/11/11 08:11	11/14/11 15:07	1
Terphenyl-d14	53		10 - 132				11/11/11 08:11	11/14/11 15:07	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		7.7	0.55	ug/L		11/11/11 08:11	11/15/11 14:14	40
Acenaphthylene	3.7	J	7.7	0.58	ug/L		11/11/11 08:11	11/15/11 14:14	40
Acetophenone	ND		38	3.1	ug/L		11/11/11 08:11	11/15/11 14:14	40
Anthracene	ND		7.7	5.8	ug/L		11/11/11 08:11	11/15/11 14:14	40
Atrazine	ND		38	3.4	ug/L		11/11/11 08:11	11/15/11 14:14	40
Benzaldehyde	ND	*	38	5.8	ug/L		11/11/11 08:11	11/15/11 14:14	40
Benzo[a]anthracene	ND		7.7	0.57	ug/L		11/11/11 08:11	11/15/11 14:14	40
Benzo[b]fluoranthene	ND		7.7	0.60	ug/L		11/11/11 08:11	11/15/11 14:14	40
Benzo[k]fluoranthene	ND		7.7	2.1	ug/L		11/11/11 08:11	11/15/11 14:14	40
Benzo[g,h,i]perylene	ND		7.7	0.58	ug/L		11/11/11 08:11	11/15/11 14:14	40
Benzo[a]pyrene	ND		7.7	0.52	ug/L		11/11/11 08:11	11/15/11 14:14	40
Bis(2-chloroethoxy)methane	ND		38	2.2	ug/L		11/11/11 08:11	11/15/11 14:14	40
Bis(2-chloroethyl)ether	ND		7.7	0.97	ug/L		11/11/11 08:11	11/15/11 14:14	40
Bis(2-ethylhexyl) phthalate	ND		77	48	ug/L		11/11/11 08:11	11/15/11 14:14	40
Butyl benzyl phthalate	ND		38	5.5	ug/L		11/11/11 08:11	11/15/11 14:14	40
1,1'-Biphenyl	ND		38	1.6	ug/L		11/11/11 08:11	11/15/11 14:14	40
Caprolactam	ND		190	46	ug/L		11/11/11 08:11	11/15/11 14:14	40
Carbazole	6.8	J	7.7	0.61	ug/L		11/11/11 08:11	11/15/11 14:14	40
Chrysene	ND		7.7	0.54	ug/L		11/11/11 08:11	11/15/11 14:14	40
2-Chloronaphthalene	ND		7.7	0.58	ug/L		11/11/11 08:11	11/15/11 14:14	40
2-Chlorophenol	ND		38	6.4	ug/L		11/11/11 08:11	11/15/11 14:14	40
2,4-Dichlorophenol	ND		7.7	1.3	ug/L		11/11/11 08:11	11/15/11 14:14	40
2,4-Dimethylphenol	6.8	J	38	3.3	ug/L		11/11/11 08:11	11/15/11 14:14	40
2,4-Dinitrophenol	ND		190	24	ug/L		11/11/11 08:11	11/15/11 14:14	40
2,4-Dinitrotoluene	ND		38	2.1	ug/L		11/11/11 08:11	11/15/11 14:14	40
2,6-Dinitrotoluene	ND		38	3.1	ug/L		11/11/11 08:11	11/15/11 14:14	40
2-Methylnaphthalene	19		7.7	0.47	ug/L		11/11/11 08:11	11/15/11 14:14	40
2-Methylphenol	9.2	J	38	3.3	ug/L		11/11/11 08:11	11/15/11 14:14	40
2-Nitroaniline	ND		190	14	ug/L		11/11/11 08:11	11/15/11 14:14	40
2-Nitrophenol	ND		38	6.6	ug/L		11/11/11 08:11	11/15/11 14:14	40
2,2'-oxybis[1-chloropropane]	ND		7.7	0.76	ug/L		11/11/11 08:11	11/15/11 14:14	40
2,4,5-Trichlorophenol	ND		38	5.9	ug/L		11/11/11 08:11	11/15/11 14:14	40
2,4,6-Trichlorophenol	ND		38	6.7	ug/L		11/11/11 08:11	11/15/11 14:14	40
4-Nitroaniline	ND		190	6.6	ug/L		11/11/11 08:11	11/15/11 14:14	40
4-Nitrophenol	ND		190	25	ug/L		11/11/11 08:11	11/15/11 14:14	40
4-Chlorophenyl phenyl ether	ND		38	1.9	ug/L		11/11/11 08:11	11/15/11 14:14	40
Methylphenol, 3 & 4	7.2	J	38	3.5	ug/L		11/11/11 08:11	11/15/11 14:14	40

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4W-11-8-11

Lab Sample ID: 180-5679-5

Date Collected: 11/08/11 14:00

Matrix: Water

Date Received: 11/08/11 16:09

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND		190	8.5	ug/L		11/11/11 08:11	11/15/11 14:14	40
4-Chloroaniline	ND		38	3.4	ug/L		11/11/11 08:11	11/15/11 14:14	40
4-Chloro-3-methylphenol	ND		38	2.9	ug/L		11/11/11 08:11	11/15/11 14:14	40
4-Bromophenyl phenyl ether	ND		38	2.4	ug/L		11/11/11 08:11	11/15/11 14:14	40
Dibenz(a,h)anthracene	ND		7.7	0.60	ug/L		11/11/11 08:11	11/15/11 14:14	40
Dibenzofuran	ND		38	2.4	ug/L		11/11/11 08:11	11/15/11 14:14	40
Di-n-butyl phthalate	ND		38	4.8	ug/L		11/11/11 08:11	11/15/11 14:14	40
Diethyl phthalate	ND		38	5.6	ug/L		11/11/11 08:11	11/15/11 14:14	40
Dimethyl phthalate	ND		38	2.9	ug/L		11/11/11 08:11	11/15/11 14:14	40
Di-n-octyl phthalate	ND		38	7.9	ug/L		11/11/11 08:11	11/15/11 14:14	40
3,3'-Dichlorobenzidine	ND		38	4.3	ug/L		11/11/11 08:11	11/15/11 14:14	40
3-Nitroaniline	ND		190	12	ug/L		11/11/11 08:11	11/15/11 14:14	40
Fluoranthene	ND		7.7	0.62	ug/L		11/11/11 08:11	11/15/11 14:14	40
Fluorene	1.1	J	7.7	0.83	ug/L		11/11/11 08:11	11/15/11 14:14	40
Hexachlorobenzene	ND		7.7	0.70	ug/L		11/11/11 08:11	11/15/11 14:14	40
Hexachlorobutadiene	ND		7.7	0.64	ug/L		11/11/11 08:11	11/15/11 14:14	40
Hexachlorocyclopentadiene	ND		38	2.0	ug/L		11/11/11 08:11	11/15/11 14:14	40
Hexachloroethane	ND		38	2.4	ug/L		11/11/11 08:11	11/15/11 14:14	40
Indeno[1,2,3-cd]pyrene	ND		7.7	0.77	ug/L		11/11/11 08:11	11/15/11 14:14	40
Isophorone	ND		38	2.5	ug/L		11/11/11 08:11	11/15/11 14:14	40
Naphthalene	410		7.7	0.54	ug/L		11/11/11 08:11	11/15/11 14:14	40
Nitrobenzene	ND		77	3.2	ug/L		11/11/11 08:11	11/15/11 14:14	40
N-Nitrosodiphenylamine	ND		38	3.3	ug/L		11/11/11 08:11	11/15/11 14:14	40
N-Nitrosodi-n-propylamine	ND		7.7	1.2	ug/L		11/11/11 08:11	11/15/11 14:14	40
Pyrene	ND		7.7	0.60	ug/L		11/11/11 08:11	11/15/11 14:14	40
Phenol	7.1	J	7.7	2.2	ug/L		11/11/11 08:11	11/15/11 14:14	40
Phenanthrene	3.4	J	7.7	1.6	ug/L		11/11/11 08:11	11/15/11 14:14	40
Pentachlorophenol	ND		38	2.6	ug/L		11/11/11 08:11	11/15/11 14:14	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	58	D	16 - 122	11/11/11 08:11	11/15/11 14:14	40
2-Fluorobiphenyl	59	D	19 - 107	11/11/11 08:11	11/15/11 14:14	40
2-Fluorophenol	54	D	10 - 111	11/11/11 08:11	11/15/11 14:14	40
Nitrobenzene-d5	58	D	23 - 112	11/11/11 08:11	11/15/11 14:14	40
Phenol-d5	67	D	15 - 112	11/11/11 08:11	11/15/11 14:14	40
Terphenyl-d14	52	D	10 - 132	11/11/11 08:11	11/15/11 14:14	40

Method: 6010B - Lead

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	720		200	9.7	ug/L		11/09/11 16:47	11/10/11 17:50	1
Antimony	ND		10	1.3	ug/L		11/09/11 16:47	11/10/11 17:50	1
Arsenic	4.7	J	10	2.7	ug/L		11/09/11 16:47	11/10/11 17:50	1
Barium	100	J	200	0.62	ug/L		11/09/11 16:47	11/10/11 17:50	1
Boron	58	J	200	1.3	ug/L		11/09/11 16:47	11/10/11 17:50	1
Beryllium	ND		4.0	0.23	ug/L		11/09/11 16:47	11/10/11 17:50	1
Cadmium	ND		5.0	0.13	ug/L		11/09/11 16:47	11/10/11 17:50	1
Calcium	240000		5000	9.7	ug/L		11/09/11 16:47	11/10/11 17:50	1
Chromium	0.83	J	5.0	0.57	ug/L		11/09/11 16:47	11/10/11 17:50	1
Cobalt	ND		50	0.40	ug/L		11/09/11 16:47	11/10/11 17:50	1
Copper	ND		25	2.7	ug/L		11/09/11 16:47	11/10/11 17:50	1
Iron	180		100	12	ug/L		11/09/11 16:47	11/10/11 17:50	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-4W-11-8-11

Lab Sample ID: 180-5679-5

Date Collected: 11/08/11 14:00

Matrix: Water

Date Received: 11/08/11 16:09

Method: 6010B - Lead (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		3.0	1.3	ug/L		11/09/11 16:47	11/10/11 17:50	1
Magnesium	ND		5000	21	ug/L		11/09/11 16:47	11/10/11 17:50	1
Manganese	ND		15	0.68	ug/L		11/09/11 16:47	11/10/11 17:50	1
Nickel	ND		40	1.6	ug/L		11/09/11 16:47	11/10/11 17:50	1
Potassium	34000		5000	750	ug/L		11/09/11 16:47	11/10/11 17:50	1
Selenium	7.4		5.0	3.0	ug/L		11/09/11 16:47	11/10/11 17:50	1
Silver	ND		5.0	0.68	ug/L		11/09/11 16:47	11/10/11 17:50	1
Sodium	170000		5000	220	ug/L		11/09/11 16:47	11/10/11 17:50	1
Thallium	2.4	J	10	2.4	ug/L		11/09/11 16:47	11/10/11 17:50	1
Vanadium	5.2	J	50	1.9	ug/L		11/09/11 16:47	11/10/11 17:50	1
Zinc	5.6	J B	20	2.5	ug/L		11/09/11 16:47	11/10/11 17:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.083	J	0.20	0.038	ug/L		11/21/11 07:20	11/22/11 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	1.9	J	4.8	1.4	mg/L		11/15/11 11:49	11/16/11 11:24	1
Ammonia, distilled	11	B	1.0	0.33	mg/L		11/09/11 16:00	11/10/11 14:56	10
Chemical Oxygen Demand	35		10	3.9	mg/L			11/09/11 16:59	1
Cyanide, Total	160		10	1.5	ug/L		11/11/11 12:00	11/14/11 09:16	1
pH	11.8	HF	0.100	0.100	SU			11/09/11 07:54	1
Total Suspended Solids	4.8		4.0	2.0	mg/L			11/09/11 14:15	1

Client Sample ID: B-2W-11-9-11

Lab Sample ID: 180-5712-1

Date Collected: 11/09/11 12:30

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.3	J	5.0	2.5	ug/L			11/22/11 12:11	1
Benzene	1.4		1.0	0.11	ug/L			11/22/11 12:11	1
Bromodichloromethane	ND		1.0	0.13	ug/L			11/22/11 12:11	1
Bromoform	ND		1.0	0.19	ug/L			11/22/11 12:11	1
Bromomethane	ND		1.0	0.31	ug/L			11/22/11 12:11	1
2-Butanone (MEK)	ND		5.0	0.55	ug/L			11/22/11 12:11	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/22/11 12:11	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/22/11 12:11	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/22/11 12:11	1
Chloroethane	ND		1.0	0.21	ug/L			11/22/11 12:11	1
Chloroform	ND		1.0	0.17	ug/L			11/22/11 12:11	1
Dibromochloromethane	ND		1.0	0.14	ug/L			11/22/11 12:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.14	ug/L			11/22/11 12:11	1
1,2-Dibromoethane (EDB)	ND		1.0	0.18	ug/L			11/22/11 12:11	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			11/22/11 12:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/22/11 12:11	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			11/22/11 12:11	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/22/11 12:11	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			11/22/11 12:11	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2W-11-9-11

Lab Sample ID: 180-5712-1

Date Collected: 11/09/11 12:30

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			11/22/11 12:11	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			11/22/11 12:11	1
Ethylbenzene	0.42	J	1.0	0.23	ug/L			11/22/11 12:11	1
2-Hexanone	ND		5.0	0.16	ug/L			11/22/11 12:11	1
Methylene Chloride	ND		1.0	0.15	ug/L			11/22/11 12:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53	ug/L			11/22/11 12:11	1
Styrene	0.57	J	1.0	0.097	ug/L			11/22/11 12:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			11/22/11 12:11	1
Tetrachloroethene	ND		1.0	0.15	ug/L			11/22/11 12:11	1
Toluene	1.1		1.0	0.15	ug/L			11/22/11 12:11	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			11/22/11 12:11	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			11/22/11 12:11	1
Trichloroethene	ND		1.0	0.14	ug/L			11/22/11 12:11	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/22/11 12:11	1
Vinyl chloride	ND		1.0	0.23	ug/L			11/22/11 12:11	1
Xylenes, Total	6.8		3.0	0.49	ug/L			11/22/11 12:11	1
Cyclohexane	ND		1.0	0.25	ug/L			11/22/11 12:11	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			11/22/11 12:11	1
Dichlorodifluoromethane	ND		1.0	0.19	ug/L			11/22/11 12:11	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/22/11 12:11	1
Methyl acetate	ND		1.0	0.14	ug/L			11/22/11 12:11	1
Methylcyclohexane	ND		1.0	0.26	ug/L			11/22/11 12:11	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			11/22/11 12:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.32	ug/L			11/22/11 12:11	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/11 12:11	1
1,3-Dichlorobenzene	ND		1.0	0.11	ug/L			11/22/11 12:11	1
1,4-Dichlorobenzene	ND		1.0	0.21	ug/L			11/22/11 12:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			11/22/11 12:11	1
Chloromethane	ND		1.0	0.28	ug/L			11/22/11 12:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 135		11/22/11 12:11	1
Toluene-d8 (Surr)	88		71 - 118		11/22/11 12:11	1
4-Bromofluorobenzene (Surr)	94		70 - 118		11/22/11 12:11	1
Dibromofluoromethane (Surr)	94		70 - 128		11/22/11 12:11	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.3		0.19	0.014	ug/L		11/14/11 08:40	11/17/11 18:55	1
Acenaphthylene	3.6		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 18:55	1
Acetophenone	0.20	J	0.96	0.077	ug/L		11/14/11 08:40	11/17/11 18:55	1
Anthracene	0.51		0.19	0.15	ug/L		11/14/11 08:40	11/17/11 18:55	1
Atrazine	ND		0.96	0.086	ug/L		11/14/11 08:40	11/17/11 18:55	1
Benzaldehyde	ND		0.96	0.14	ug/L		11/14/11 08:40	11/17/11 18:55	1
Benzo[a]anthracene	ND		0.19	0.014	ug/L		11/14/11 08:40	11/17/11 18:55	1
Benzo[b]fluoranthene	ND		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 18:55	1
Benzo[k]fluoranthene	ND		0.19	0.053	ug/L		11/14/11 08:40	11/17/11 18:55	1
Benzo[g,h,i]perylene	ND		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 18:55	1
Benzo[a]pyrene	ND		0.19	0.013	ug/L		11/14/11 08:40	11/17/11 18:55	1
Bis(2-chloroethoxy)methane	ND		0.96	0.056	ug/L		11/14/11 08:40	11/17/11 18:55	1
Bis(2-chloroethyl)ether	ND		0.19	0.024	ug/L		11/14/11 08:40	11/17/11 18:55	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2W-11-9-11

Lab Sample ID: 180-5712-1

Date Collected: 11/09/11 12:30

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		1.9	1.2	ug/L		11/14/11 08:40	11/17/11 18:55	1
Butyl benzyl phthalate	ND		0.96	0.14	ug/L		11/14/11 08:40	11/17/11 18:55	1
1,1'-Biphenyl	2.1		0.96	0.040	ug/L		11/14/11 08:40	11/17/11 18:55	1
Caprolactam	ND		4.8	1.1	ug/L		11/14/11 08:40	11/17/11 18:55	1
Carbazole	0.39		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 18:55	1
Chrysene	ND		0.19	0.013	ug/L		11/14/11 08:40	11/17/11 18:55	1
2-Chloronaphthalene	ND		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 18:55	1
2-Chlorophenol	ND		0.96	0.16	ug/L		11/14/11 08:40	11/17/11 18:55	1
2,4-Dichlorophenol	ND		0.19	0.032	ug/L		11/14/11 08:40	11/17/11 18:55	1
2,4-Dimethylphenol	ND		0.96	0.082	ug/L		11/14/11 08:40	11/17/11 18:55	1
2,4-Dinitrophenol	ND		4.8	0.59	ug/L		11/14/11 08:40	11/17/11 18:55	1
2,4-Dinitrotoluene	ND		0.96	0.052	ug/L		11/14/11 08:40	11/17/11 18:55	1
2,6-Dinitrotoluene	ND		0.96	0.077	ug/L		11/14/11 08:40	11/17/11 18:55	1
2-Methylnaphthalene	9.5		0.19	0.012	ug/L		11/14/11 08:40	11/17/11 18:55	1
2-Methylphenol	0.26	J	0.96	0.083	ug/L		11/14/11 08:40	11/17/11 18:55	1
2-Nitroaniline	ND		4.8	0.34	ug/L		11/14/11 08:40	11/17/11 18:55	1
2-Nitrophenol	ND		0.96	0.16	ug/L		11/14/11 08:40	11/17/11 18:55	1
2,2'-oxybis[1-chloropropane]	ND		0.19	0.019	ug/L		11/14/11 08:40	11/17/11 18:55	1
2,4,5-Trichlorophenol	ND		0.96	0.15	ug/L		11/14/11 08:40	11/17/11 18:55	1
2,4,6-Trichlorophenol	ND		0.96	0.17	ug/L		11/14/11 08:40	11/17/11 18:55	1
4-Nitroaniline	ND		4.8	0.17	ug/L		11/14/11 08:40	11/17/11 18:55	1
4-Nitrophenol	ND		4.8	0.62	ug/L		11/14/11 08:40	11/17/11 18:55	1
4-Chlorophenyl phenyl ether	ND		0.96	0.048	ug/L		11/14/11 08:40	11/17/11 18:55	1
Methylphenol, 3 & 4	0.60	J	0.96	0.087	ug/L		11/14/11 08:40	11/17/11 18:55	1
4,6-Dinitro-2-methylphenol	ND		4.8	0.21	ug/L		11/14/11 08:40	11/17/11 18:55	1
4-Chloroaniline	ND		0.96	0.085	ug/L		11/14/11 08:40	11/17/11 18:55	1
4-Chloro-3-methylphenol	ND		0.96	0.073	ug/L		11/14/11 08:40	11/17/11 18:55	1
4-Bromophenyl phenyl ether	ND		0.96	0.061	ug/L		11/14/11 08:40	11/17/11 18:55	1
Dibenz(a,h)anthracene	ND		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 18:55	1
Dibenzofuran	4.6		0.96	0.059	ug/L		11/14/11 08:40	11/17/11 18:55	1
Di-n-butyl phthalate	ND		0.96	0.12	ug/L		11/14/11 08:40	11/17/11 18:55	1
Diethyl phthalate	ND		0.96	0.14	ug/L		11/14/11 08:40	11/17/11 18:55	1
Dimethyl phthalate	ND		0.96	0.074	ug/L		11/14/11 08:40	11/17/11 18:55	1
Di-n-octyl phthalate	ND		0.96	0.20	ug/L		11/14/11 08:40	11/17/11 18:55	1
3,3'-Dichlorobenzidine	ND		0.96	0.11	ug/L		11/14/11 08:40	11/17/11 18:55	1
3-Nitroaniline	ND		4.8	0.31	ug/L		11/14/11 08:40	11/17/11 18:55	1
Fluoranthene	0.71		0.19	0.016	ug/L		11/14/11 08:40	11/17/11 18:55	1
Fluorene	4.1		0.19	0.021	ug/L		11/14/11 08:40	11/17/11 18:55	1
Hexachlorobenzene	ND		0.19	0.018	ug/L		11/14/11 08:40	11/17/11 18:55	1
Hexachlorobutadiene	ND		0.19	0.016	ug/L		11/14/11 08:40	11/17/11 18:55	1
Hexachlorocyclopentadiene	ND		0.96	0.050	ug/L		11/14/11 08:40	11/17/11 18:55	1
Hexachloroethane	ND		0.96	0.060	ug/L		11/14/11 08:40	11/17/11 18:55	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.019	ug/L		11/14/11 08:40	11/17/11 18:55	1
Isophorone	ND		0.96	0.062	ug/L		11/14/11 08:40	11/17/11 18:55	1
Naphthalene	43	E	0.19	0.013	ug/L		11/14/11 08:40	11/17/11 18:55	1
Nitrobenzene	ND		1.9	0.081	ug/L		11/14/11 08:40	11/17/11 18:55	1
N-Nitrosodiphenylamine	ND		0.96	0.082	ug/L		11/14/11 08:40	11/17/11 18:55	1
N-Nitrosodi-n-propylamine	ND		0.19	0.030	ug/L		11/14/11 08:40	11/17/11 18:55	1
Pyrene	0.58		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 18:55	1
Phenol	1.3		0.19	0.056	ug/L		11/14/11 08:40	11/17/11 18:55	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2W-11-9-11

Lab Sample ID: 180-5712-1

Date Collected: 11/09/11 12:30

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	6.1		0.19	0.041	ug/L		11/14/11 08:40	11/17/11 18:55	1
Pentachlorophenol	ND		0.96	0.064	ug/L		11/14/11 08:40	11/17/11 18:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	69		16 - 122				11/14/11 08:40	11/17/11 18:55	1
2-Fluorobiphenyl	52		19 - 107				11/14/11 08:40	11/17/11 18:55	1
2-Fluorophenol	47		10 - 111				11/14/11 08:40	11/17/11 18:55	1
Nitrobenzene-d5	47		23 - 112				11/14/11 08:40	11/17/11 18:55	1
Phenol-d5	51		15 - 112				11/14/11 08:40	11/17/11 18:55	1
Terphenyl-d14	47		10 - 132				11/14/11 08:40	11/17/11 18:55	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.4		0.77	0.055	ug/L		11/14/11 08:40	11/18/11 23:19	4
Acenaphthylene	3.5		0.77	0.058	ug/L		11/14/11 08:40	11/18/11 23:19	4
Acetophenone	ND		3.8	0.31	ug/L		11/14/11 08:40	11/18/11 23:19	4
Anthracene	ND		0.77	0.58	ug/L		11/14/11 08:40	11/18/11 23:19	4
Atrazine	ND		3.8	0.34	ug/L		11/14/11 08:40	11/18/11 23:19	4
Benzaldehyde	ND		3.8	0.58	ug/L		11/14/11 08:40	11/18/11 23:19	4
Benzo[a]anthracene	ND		0.77	0.057	ug/L		11/14/11 08:40	11/18/11 23:19	4
Benzo[b]fluoranthene	ND		0.77	0.060	ug/L		11/14/11 08:40	11/18/11 23:19	4
Benzo[k]fluoranthene	ND		0.77	0.21	ug/L		11/14/11 08:40	11/18/11 23:19	4
Benzo[g,h,i]perylene	ND		0.77	0.058	ug/L		11/14/11 08:40	11/18/11 23:19	4
Benzo[a]pyrene	ND		0.77	0.052	ug/L		11/14/11 08:40	11/18/11 23:19	4
Bis(2-chloroethoxy)methane	ND		3.8	0.22	ug/L		11/14/11 08:40	11/18/11 23:19	4
Bis(2-chloroethyl)ether	ND		0.77	0.097	ug/L		11/14/11 08:40	11/18/11 23:19	4
Bis(2-ethylhexyl) phthalate	ND		7.7	4.8	ug/L		11/14/11 08:40	11/18/11 23:19	4
Butyl benzyl phthalate	ND		3.8	0.55	ug/L		11/14/11 08:40	11/18/11 23:19	4
1,1'-Biphenyl	2.1	J	3.8	0.16	ug/L		11/14/11 08:40	11/18/11 23:19	4
Caprolactam	ND		19	4.6	ug/L		11/14/11 08:40	11/18/11 23:19	4
Carbazole	0.46	J	0.77	0.061	ug/L		11/14/11 08:40	11/18/11 23:19	4
Chrysene	ND		0.77	0.054	ug/L		11/14/11 08:40	11/18/11 23:19	4
2-Chloronaphthalene	ND		0.77	0.058	ug/L		11/14/11 08:40	11/18/11 23:19	4
2-Chlorophenol	ND		3.8	0.64	ug/L		11/14/11 08:40	11/18/11 23:19	4
2,4-Dichlorophenol	ND		0.77	0.13	ug/L		11/14/11 08:40	11/18/11 23:19	4
2,4-Dimethylphenol	ND		3.8	0.33	ug/L		11/14/11 08:40	11/18/11 23:19	4
2,4-Dinitrophenol	ND		19	2.4	ug/L		11/14/11 08:40	11/18/11 23:19	4
2,4-Dinitrotoluene	ND		3.8	0.21	ug/L		11/14/11 08:40	11/18/11 23:19	4
2,6-Dinitrotoluene	ND		3.8	0.31	ug/L		11/14/11 08:40	11/18/11 23:19	4
2-Methylnaphthalene	9.5		0.77	0.047	ug/L		11/14/11 08:40	11/18/11 23:19	4
2-Methylphenol	ND		3.8	0.33	ug/L		11/14/11 08:40	11/18/11 23:19	4
2-Nitroaniline	ND		19	1.4	ug/L		11/14/11 08:40	11/18/11 23:19	4
2-Nitrophenol	ND		3.8	0.66	ug/L		11/14/11 08:40	11/18/11 23:19	4
2,2'-oxybis[1-chloropropane]	ND		0.77	0.076	ug/L		11/14/11 08:40	11/18/11 23:19	4
2,4,5-Trichlorophenol	ND		3.8	0.59	ug/L		11/14/11 08:40	11/18/11 23:19	4
2,4,6-Trichlorophenol	ND		3.8	0.67	ug/L		11/14/11 08:40	11/18/11 23:19	4
4-Nitroaniline	ND		19	0.66	ug/L		11/14/11 08:40	11/18/11 23:19	4
4-Nitrophenol	ND		19	2.5	ug/L		11/14/11 08:40	11/18/11 23:19	4
4-Chlorophenyl phenyl ether	ND		3.8	0.19	ug/L		11/14/11 08:40	11/18/11 23:19	4
Methylphenol, 3 & 4	0.41	J	3.8	0.35	ug/L		11/14/11 08:40	11/18/11 23:19	4
4,6-Dinitro-2-methylphenol	ND		19	0.85	ug/L		11/14/11 08:40	11/18/11 23:19	4

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2W-11-9-11

Lab Sample ID: 180-5712-1

Date Collected: 11/09/11 12:30

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		3.8	0.34	ug/L		11/14/11 08:40	11/18/11 23:19	4
4-Chloro-3-methylphenol	ND		3.8	0.29	ug/L		11/14/11 08:40	11/18/11 23:19	4
4-Bromophenyl phenyl ether	ND		3.8	0.24	ug/L		11/14/11 08:40	11/18/11 23:19	4
Dibenz(a,h)anthracene	ND		0.77	0.060	ug/L		11/14/11 08:40	11/18/11 23:19	4
Dibenzofuran	4.7		3.8	0.24	ug/L		11/14/11 08:40	11/18/11 23:19	4
Di-n-butyl phthalate	ND		3.8	0.48	ug/L		11/14/11 08:40	11/18/11 23:19	4
Diethyl phthalate	ND		3.8	0.56	ug/L		11/14/11 08:40	11/18/11 23:19	4
Dimethyl phthalate	ND		3.8	0.29	ug/L		11/14/11 08:40	11/18/11 23:19	4
Di-n-octyl phthalate	ND		3.8	0.79	ug/L		11/14/11 08:40	11/18/11 23:19	4
3,3'-Dichlorobenzidine	ND		3.8	0.43	ug/L		11/14/11 08:40	11/18/11 23:19	4
3-Nitroaniline	ND		19	1.2	ug/L		11/14/11 08:40	11/18/11 23:19	4
Fluoranthene	0.87		0.77	0.062	ug/L		11/14/11 08:40	11/18/11 23:19	4
Fluorene	4.0		0.77	0.083	ug/L		11/14/11 08:40	11/18/11 23:19	4
Hexachlorobenzene	ND		0.77	0.070	ug/L		11/14/11 08:40	11/18/11 23:19	4
Hexachlorobutadiene	ND		0.77	0.064	ug/L		11/14/11 08:40	11/18/11 23:19	4
Hexachlorocyclopentadiene	ND		3.8	0.20	ug/L		11/14/11 08:40	11/18/11 23:19	4
Hexachloroethane	ND		3.8	0.24	ug/L		11/14/11 08:40	11/18/11 23:19	4
Indeno[1,2,3-cd]pyrene	ND		0.77	0.077	ug/L		11/14/11 08:40	11/18/11 23:19	4
Isophorone	ND		3.8	0.25	ug/L		11/14/11 08:40	11/18/11 23:19	4
Naphthalene	58		0.77	0.054	ug/L		11/14/11 08:40	11/18/11 23:19	4
Nitrobenzene	ND		7.7	0.32	ug/L		11/14/11 08:40	11/18/11 23:19	4
N-Nitrosodiphenylamine	ND		3.8	0.33	ug/L		11/14/11 08:40	11/18/11 23:19	4
N-Nitrosodi-n-propylamine	ND		0.77	0.12	ug/L		11/14/11 08:40	11/18/11 23:19	4
Pyrene	0.61 J		0.77	0.060	ug/L		11/14/11 08:40	11/18/11 23:19	4
Phenol	1.3		0.77	0.22	ug/L		11/14/11 08:40	11/18/11 23:19	4
Phenanthrene	6.0		0.77	0.16	ug/L		11/14/11 08:40	11/18/11 23:19	4
Pentachlorophenol	ND		3.8	0.26	ug/L		11/14/11 08:40	11/18/11 23:19	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	71		16 - 122				11/14/11 08:40	11/18/11 23:19	4
2-Fluorobiphenyl	51		19 - 107				11/14/11 08:40	11/18/11 23:19	4
2-Fluorophenol	45		10 - 111				11/14/11 08:40	11/18/11 23:19	4
Nitrobenzene-d5	45		23 - 112				11/14/11 08:40	11/18/11 23:19	4
Phenol-d5	49		15 - 112				11/14/11 08:40	11/18/11 23:19	4
Terphenyl-d14	49		10 - 132				11/14/11 08:40	11/18/11 23:19	4

Method: 6010B - Lead

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	140 J		200	9.7	ug/L		11/11/11 09:31	11/14/11 14:38	1
Antimony	2.3 J		10	1.3	ug/L		11/11/11 09:31	11/14/11 14:38	1
Arsenic	ND		10	2.7	ug/L		11/11/11 09:31	11/14/11 14:38	1
Barium	51 J		200	0.62	ug/L		11/11/11 09:31	11/14/11 14:38	1
Boron	290		200	1.3	ug/L		11/11/11 09:31	11/14/11 14:38	1
Beryllium	0.41 J		4.0	0.23	ug/L		11/11/11 09:31	11/14/11 14:38	1
Cadmium	ND		5.0	0.13	ug/L		11/11/11 09:31	11/14/11 14:38	1
Calcium	95000		5000	9.7	ug/L		11/11/11 09:31	11/14/11 14:38	1
Chromium	ND		5.0	0.57	ug/L		11/11/11 09:31	11/14/11 14:38	1
Cobalt	ND		50	0.40	ug/L		11/11/11 09:31	11/14/11 14:38	1
Copper	ND		25	2.7	ug/L		11/11/11 09:31	11/14/11 14:38	1
Iron	41 J		100	12	ug/L		11/11/11 09:31	11/14/11 14:38	1
Lead	ND		3.0	1.3	ug/L		11/11/11 09:31	11/14/11 14:38	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-2W-11-9-11

Lab Sample ID: 180-5712-1

Date Collected: 11/09/11 12:30

Matrix: Water

Date Received: 11/09/11 15:19

Method: 6010B - Lead (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	650	J	5000	21	ug/L		11/11/11 09:31	11/14/11 14:38	1
Manganese	4.0	J	15	0.68	ug/L		11/11/11 09:31	11/14/11 14:38	1
Nickel	ND		40	1.6	ug/L		11/11/11 09:31	11/14/11 14:38	1
Potassium	8000		5000	750	ug/L		11/11/11 09:31	11/14/11 14:38	1
Selenium	27		5.0	3.0	ug/L		11/11/11 09:31	11/14/11 14:38	1
Silver	ND		5.0	0.68	ug/L		11/11/11 09:31	11/14/11 14:38	1
Sodium	94000		5000	220	ug/L		11/11/11 09:31	11/14/11 14:38	1
Thallium	ND		10	2.4	ug/L		11/11/11 09:31	11/14/11 14:38	1
Vanadium	2.0	J	50	1.9	ug/L		11/11/11 09:31	11/14/11 14:38	1
Zinc	4.4	J B	20	2.5	ug/L		11/11/11 09:31	11/14/11 14:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.038	ug/L		11/29/11 13:52	11/29/11 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	2.5	J	4.8	1.4	mg/L		11/17/11 17:19	11/18/11 16:27	1
Ammonia, distilled	1.0		0.10	0.033	mg/L		11/15/11 10:00	11/15/11 14:55	1
Chemical Oxygen Demand	13		10	3.9	mg/L			11/11/11 05:53	1
Cyanide, Total	15		10	1.5	ug/L		11/11/11 12:00	11/14/11 09:16	1
pH	10.8	HF	0.100	0.100	SU			11/10/11 12:39	1
Total Suspended Solids	ND		4.0	2.0	mg/L			11/10/11 12:16	1

Client Sample ID: B-1W-11-9-11

Lab Sample ID: 180-5712-2

Date Collected: 11/09/11 14:00

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	5.0	ug/L			11/22/11 12:35	2
Benzene	39		2.0	0.21	ug/L			11/22/11 12:35	2
Bromodichloromethane	ND		2.0	0.26	ug/L			11/22/11 12:35	2
Bromoform	ND		2.0	0.38	ug/L			11/22/11 12:35	2
Bromomethane	ND		2.0	0.63	ug/L			11/22/11 12:35	2
2-Butanone (MEK)	ND		10	1.1	ug/L			11/22/11 12:35	2
Carbon disulfide	ND		2.0	0.42	ug/L			11/22/11 12:35	2
Carbon tetrachloride	ND		2.0	0.27	ug/L			11/22/11 12:35	2
Chlorobenzene	ND		2.0	0.27	ug/L			11/22/11 12:35	2
Chloroethane	ND		2.0	0.43	ug/L			11/22/11 12:35	2
Chloroform	ND		2.0	0.34	ug/L			11/22/11 12:35	2
Dibromochloromethane	ND		2.0	0.27	ug/L			11/22/11 12:35	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.28	ug/L			11/22/11 12:35	2
1,2-Dibromoethane (EDB)	ND		2.0	0.36	ug/L			11/22/11 12:35	2
1,1-Dichloroethane	ND		2.0	0.23	ug/L			11/22/11 12:35	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			11/22/11 12:35	2
1,1-Dichloroethene	ND		2.0	0.59	ug/L			11/22/11 12:35	2
trans-1,2-Dichloroethene	ND		2.0	0.34	ug/L			11/22/11 12:35	2
1,2-Dichloropropane	ND		2.0	0.19	ug/L			11/22/11 12:35	2
cis-1,3-Dichloropropene	ND		2.0	0.37	ug/L			11/22/11 12:35	2

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1W-11-9-11

Lab Sample ID: 180-5712-2

Date Collected: 11/09/11 14:00

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		2.0	0.30	ug/L			11/22/11 12:35	2
Ethylbenzene	2.5		2.0	0.45	ug/L			11/22/11 12:35	2
2-Hexanone	ND		10	0.32	ug/L			11/22/11 12:35	2
Methylene Chloride	ND		2.0	0.30	ug/L			11/22/11 12:35	2
4-Methyl-2-pentanone (MIBK)	ND		10	1.1	ug/L			11/22/11 12:35	2
Styrene	ND		2.0	0.19	ug/L			11/22/11 12:35	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.40	ug/L			11/22/11 12:35	2
Tetrachloroethene	ND		2.0	0.30	ug/L			11/22/11 12:35	2
Toluene	11		2.0	0.30	ug/L			11/22/11 12:35	2
1,1,1-Trichloroethane	ND		2.0	0.57	ug/L			11/22/11 12:35	2
1,1,2-Trichloroethane	ND		2.0	0.40	ug/L			11/22/11 12:35	2
Trichloroethene	ND		2.0	0.29	ug/L			11/22/11 12:35	2
Trichlorofluoromethane	ND		2.0	0.40	ug/L			11/22/11 12:35	2
Vinyl chloride	ND		2.0	0.45	ug/L			11/22/11 12:35	2
Xylenes, Total	18		6.0	0.98	ug/L			11/22/11 12:35	2
Cyclohexane	ND		2.0	0.51	ug/L			11/22/11 12:35	2
cis-1,2-Dichloroethene	ND		2.0	0.47	ug/L			11/22/11 12:35	2
Dichlorodifluoromethane	ND		2.0	0.39	ug/L			11/22/11 12:35	2
Isopropylbenzene	ND		2.0	0.33	ug/L			11/22/11 12:35	2
Methyl acetate	ND		2.0	0.28	ug/L			11/22/11 12:35	2
Methylcyclohexane	ND		2.0	0.52	ug/L			11/22/11 12:35	2
Methyl tert-butyl ether	ND		2.0	0.37	ug/L			11/22/11 12:35	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.64	ug/L			11/22/11 12:35	2
1,2-Dichlorobenzene	ND		2.0	0.30	ug/L			11/22/11 12:35	2
1,3-Dichlorobenzene	ND		2.0	0.21	ug/L			11/22/11 12:35	2
1,4-Dichlorobenzene	ND		2.0	0.41	ug/L			11/22/11 12:35	2
1,2,4-Trichlorobenzene	ND		2.0	0.54	ug/L			11/22/11 12:35	2
Chloromethane	ND		2.0	0.57	ug/L			11/22/11 12:35	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 135					11/22/11 12:35	2
Toluene-d8 (Surr)	91		71 - 118					11/22/11 12:35	2
4-Bromofluorobenzene (Surr)	98		70 - 118					11/22/11 12:35	2
Dibromofluoromethane (Surr)	93		70 - 128					11/22/11 12:35	2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.0		0.19	0.014	ug/L		11/14/11 08:40	11/17/11 19:18	1
Acenaphthylene	4.2		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 19:18	1
Acetophenone	0.65	J	0.97	0.078	ug/L		11/14/11 08:40	11/17/11 19:18	1
Anthracene	0.33		0.19	0.15	ug/L		11/14/11 08:40	11/17/11 19:18	1
Atrazine	ND		0.97	0.087	ug/L		11/14/11 08:40	11/17/11 19:18	1
Benzaldehyde	ND		0.97	0.15	ug/L		11/14/11 08:40	11/17/11 19:18	1
Benzo[a]anthracene	ND		0.19	0.014	ug/L		11/14/11 08:40	11/17/11 19:18	1
Benzo[b]fluoranthene	ND		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 19:18	1
Benzo[k]fluoranthene	ND		0.19	0.053	ug/L		11/14/11 08:40	11/17/11 19:18	1
Benzo[g,h,i]perylene	ND		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 19:18	1
Benzo[a]pyrene	ND		0.19	0.013	ug/L		11/14/11 08:40	11/17/11 19:18	1
Bis(2-chloroethoxy)methane	ND		0.97	0.056	ug/L		11/14/11 08:40	11/17/11 19:18	1
Bis(2-chloroethyl)ether	ND		0.19	0.024	ug/L		11/14/11 08:40	11/17/11 19:18	1
Bis(2-ethylhexyl) phthalate	ND		1.9	1.2	ug/L		11/14/11 08:40	11/17/11 19:18	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1W-11-9-11

Lab Sample ID: 180-5712-2

Date Collected: 11/09/11 14:00

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND		0.97	0.14	ug/L		11/14/11 08:40	11/17/11 19:18	1
1,1'-Biphenyl	1.6		0.97	0.040	ug/L		11/14/11 08:40	11/17/11 19:18	1
Caprolactam	ND		4.9	1.2	ug/L		11/14/11 08:40	11/17/11 19:18	1
Carbazole	0.83		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 19:18	1
Chrysene	ND		0.19	0.014	ug/L		11/14/11 08:40	11/17/11 19:18	1
2-Chloronaphthalene	ND		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 19:18	1
2-Chlorophenol	ND		0.97	0.16	ug/L		11/14/11 08:40	11/17/11 19:18	1
2,4-Dichlorophenol	ND		0.19	0.032	ug/L		11/14/11 08:40	11/17/11 19:18	1
2,4-Dimethylphenol	ND		0.97	0.083	ug/L		11/14/11 08:40	11/17/11 19:18	1
2,4-Dinitrophenol	ND		4.9	0.60	ug/L		11/14/11 08:40	11/17/11 19:18	1
2,4-Dinitrotoluene	ND		0.97	0.052	ug/L		11/14/11 08:40	11/17/11 19:18	1
2,6-Dinitrotoluene	ND		0.97	0.077	ug/L		11/14/11 08:40	11/17/11 19:18	1
2-Methylnaphthalene	5.3		0.19	0.012	ug/L		11/14/11 08:40	11/17/11 19:18	1
2-Methylphenol	0.22	J	0.97	0.084	ug/L		11/14/11 08:40	11/17/11 19:18	1
2-Nitroaniline	ND		4.9	0.34	ug/L		11/14/11 08:40	11/17/11 19:18	1
2-Nitrophenol	ND		0.97	0.17	ug/L		11/14/11 08:40	11/17/11 19:18	1
2,2'-oxybis[1-chloropropane]	ND		0.19	0.019	ug/L		11/14/11 08:40	11/17/11 19:18	1
2,4,5-Trichlorophenol	ND		0.97	0.15	ug/L		11/14/11 08:40	11/17/11 19:18	1
2,4,6-Trichlorophenol	ND		0.97	0.17	ug/L		11/14/11 08:40	11/17/11 19:18	1
4-Nitroaniline	ND		4.9	0.17	ug/L		11/14/11 08:40	11/17/11 19:18	1
4-Nitrophenol	ND		4.9	0.63	ug/L		11/14/11 08:40	11/17/11 19:18	1
4-Chlorophenyl phenyl ether	ND		0.97	0.049	ug/L		11/14/11 08:40	11/17/11 19:18	1
Methylphenol, 3 & 4	0.41	J	0.97	0.088	ug/L		11/14/11 08:40	11/17/11 19:18	1
4,6-Dinitro-2-methylphenol	ND		4.9	0.21	ug/L		11/14/11 08:40	11/17/11 19:18	1
4-Chloroaniline	ND		0.97	0.086	ug/L		11/14/11 08:40	11/17/11 19:18	1
4-Chloro-3-methylphenol	ND		0.97	0.073	ug/L		11/14/11 08:40	11/17/11 19:18	1
4-Bromophenyl phenyl ether	ND		0.97	0.062	ug/L		11/14/11 08:40	11/17/11 19:18	1
Dibenz(a,h)anthracene	ND		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 19:18	1
Dibenzofuran	4.4		0.97	0.060	ug/L		11/14/11 08:40	11/17/11 19:18	1
Di-n-butyl phthalate	ND		0.97	0.12	ug/L		11/14/11 08:40	11/17/11 19:18	1
Diethyl phthalate	ND		0.97	0.14	ug/L		11/14/11 08:40	11/17/11 19:18	1
Dimethyl phthalate	ND		0.97	0.074	ug/L		11/14/11 08:40	11/17/11 19:18	1
Di-n-octyl phthalate	ND		0.97	0.20	ug/L		11/14/11 08:40	11/17/11 19:18	1
3,3'-Dichlorobenzidine	ND		0.97	0.11	ug/L		11/14/11 08:40	11/17/11 19:18	1
3-Nitroaniline	ND		4.9	0.31	ug/L		11/14/11 08:40	11/17/11 19:18	1
Fluoranthene	0.64		0.19	0.016	ug/L		11/14/11 08:40	11/17/11 19:18	1
Fluorene	3.3		0.19	0.021	ug/L		11/14/11 08:40	11/17/11 19:18	1
Hexachlorobenzene	ND		0.19	0.018	ug/L		11/14/11 08:40	11/17/11 19:18	1
Hexachlorobutadiene	ND		0.19	0.016	ug/L		11/14/11 08:40	11/17/11 19:18	1
Hexachlorocyclopentadiene	ND		0.97	0.050	ug/L		11/14/11 08:40	11/17/11 19:18	1
Hexachloroethane	ND		0.97	0.061	ug/L		11/14/11 08:40	11/17/11 19:18	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.019	ug/L		11/14/11 08:40	11/17/11 19:18	1
Isophorone	ND		0.97	0.063	ug/L		11/14/11 08:40	11/17/11 19:18	1
Naphthalene	53	E	0.19	0.014	ug/L		11/14/11 08:40	11/17/11 19:18	1
Nitrobenzene	ND		1.9	0.082	ug/L		11/14/11 08:40	11/17/11 19:18	1
N-Nitrosodiphenylamine	ND		0.97	0.083	ug/L		11/14/11 08:40	11/17/11 19:18	1
N-Nitrosodi-n-propylamine	ND		0.19	0.030	ug/L		11/14/11 08:40	11/17/11 19:18	1
Pyrene	0.56		0.19	0.015	ug/L		11/14/11 08:40	11/17/11 19:18	1
Phenol	0.47		0.19	0.056	ug/L		11/14/11 08:40	11/17/11 19:18	1
Phenanthrene	3.4		0.19	0.041	ug/L		11/14/11 08:40	11/17/11 19:18	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1W-11-9-11

Lab Sample ID: 180-5712-2

Date Collected: 11/09/11 14:00

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.97	0.064	ug/L		11/14/11 08:40	11/17/11 19:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	60		16 - 122				11/14/11 08:40	11/17/11 19:18	1
2-Fluorobiphenyl	47		19 - 107				11/14/11 08:40	11/17/11 19:18	1
2-Fluorophenol	40		10 - 111				11/14/11 08:40	11/17/11 19:18	1
Nitrobenzene-d5	44		23 - 112				11/14/11 08:40	11/17/11 19:18	1
Phenol-d5	42		15 - 112				11/14/11 08:40	11/17/11 19:18	1
Terphenyl-d14	38		10 - 132				11/14/11 08:40	11/17/11 19:18	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.4		0.97	0.070	ug/L		11/14/11 08:40	11/18/11 23:43	5
Acenaphthylene	4.3		0.97	0.074	ug/L		11/14/11 08:40	11/18/11 23:43	5
Acetophenone	ND		4.9	0.39	ug/L		11/14/11 08:40	11/18/11 23:43	5
Anthracene	ND		0.97	0.73	ug/L		11/14/11 08:40	11/18/11 23:43	5
Atrazine	ND		4.9	0.43	ug/L		11/14/11 08:40	11/18/11 23:43	5
Benzaldehyde	ND		4.9	0.73	ug/L		11/14/11 08:40	11/18/11 23:43	5
Benzo[a]anthracene	ND		0.97	0.071	ug/L		11/14/11 08:40	11/18/11 23:43	5
Benzo[b]fluoranthene	ND		0.97	0.076	ug/L		11/14/11 08:40	11/18/11 23:43	5
Benzo[k]fluoranthene	ND		0.97	0.27	ug/L		11/14/11 08:40	11/18/11 23:43	5
Benzo[g,h,i]perylene	ND		0.97	0.073	ug/L		11/14/11 08:40	11/18/11 23:43	5
Benzo[a]pyrene	ND		0.97	0.065	ug/L		11/14/11 08:40	11/18/11 23:43	5
Bis(2-chloroethoxy)methane	ND		4.9	0.28	ug/L		11/14/11 08:40	11/18/11 23:43	5
Bis(2-chloroethyl)ether	ND		0.97	0.12	ug/L		11/14/11 08:40	11/18/11 23:43	5
Bis(2-ethylhexyl) phthalate	ND		9.7	6.1	ug/L		11/14/11 08:40	11/18/11 23:43	5
Butyl benzyl phthalate	ND		4.9	0.69	ug/L		11/14/11 08:40	11/18/11 23:43	5
1,1'-Biphenyl	1.8 J		4.9	0.20	ug/L		11/14/11 08:40	11/18/11 23:43	5
Caprolactam	ND		24	5.8	ug/L		11/14/11 08:40	11/18/11 23:43	5
Carbazole	0.91 J		0.97	0.077	ug/L		11/14/11 08:40	11/18/11 23:43	5
Chrysene	ND		0.97	0.068	ug/L		11/14/11 08:40	11/18/11 23:43	5
2-Chloronaphthalene	ND		0.97	0.073	ug/L		11/14/11 08:40	11/18/11 23:43	5
2-Chlorophenol	ND		4.9	0.80	ug/L		11/14/11 08:40	11/18/11 23:43	5
2,4-Dichlorophenol	ND		0.97	0.16	ug/L		11/14/11 08:40	11/18/11 23:43	5
2,4-Dimethylphenol	ND		4.9	0.41	ug/L		11/14/11 08:40	11/18/11 23:43	5
2,4-Dinitrophenol	ND		24	3.0	ug/L		11/14/11 08:40	11/18/11 23:43	5
2,4-Dinitrotoluene	ND		4.9	0.26	ug/L		11/14/11 08:40	11/18/11 23:43	5
2,6-Dinitrotoluene	ND		4.9	0.39	ug/L		11/14/11 08:40	11/18/11 23:43	5
2-Methylnaphthalene	5.2		0.97	0.059	ug/L		11/14/11 08:40	11/18/11 23:43	5
2-Methylphenol	ND		4.9	0.42	ug/L		11/14/11 08:40	11/18/11 23:43	5
2-Nitroaniline	ND		24	1.7	ug/L		11/14/11 08:40	11/18/11 23:43	5
2-Nitrophenol	ND		4.9	0.83	ug/L		11/14/11 08:40	11/18/11 23:43	5
2,2'-oxybis[1-chloropropane]	ND		0.97	0.096	ug/L		11/14/11 08:40	11/18/11 23:43	5
2,4,5-Trichlorophenol	ND		4.9	0.74	ug/L		11/14/11 08:40	11/18/11 23:43	5
2,4,6-Trichlorophenol	ND		4.9	0.85	ug/L		11/14/11 08:40	11/18/11 23:43	5
4-Nitroaniline	ND		24	0.84	ug/L		11/14/11 08:40	11/18/11 23:43	5
4-Nitrophenol	ND		24	3.1	ug/L		11/14/11 08:40	11/18/11 23:43	5
4-Chlorophenyl phenyl ether	ND		4.9	0.24	ug/L		11/14/11 08:40	11/18/11 23:43	5
Methylphenol, 3 & 4	ND		4.9	0.44	ug/L		11/14/11 08:40	11/18/11 23:43	5
4,6-Dinitro-2-methylphenol	ND		24	1.1	ug/L		11/14/11 08:40	11/18/11 23:43	5
4-Chloroaniline	ND		4.9	0.43	ug/L		11/14/11 08:40	11/18/11 23:43	5

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1W-11-9-11

Lab Sample ID: 180-5712-2

Date Collected: 11/09/11 14:00

Matrix: Water

Date Received: 11/09/11 15:19

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	ND		4.9	0.37	ug/L		11/14/11 08:40	11/18/11 23:43	5
4-Bromophenyl phenyl ether	ND		4.9	0.31	ug/L		11/14/11 08:40	11/18/11 23:43	5
Dibenz(a,h)anthracene	ND		0.97	0.075	ug/L		11/14/11 08:40	11/18/11 23:43	5
Dibenzofuran	4.7	J	4.9	0.30	ug/L		11/14/11 08:40	11/18/11 23:43	5
Di-n-butyl phthalate	ND		4.9	0.61	ug/L		11/14/11 08:40	11/18/11 23:43	5
Diethyl phthalate	ND		4.9	0.71	ug/L		11/14/11 08:40	11/18/11 23:43	5
Dimethyl phthalate	ND		4.9	0.37	ug/L		11/14/11 08:40	11/18/11 23:43	5
Di-n-octyl phthalate	ND		4.9	1.0	ug/L		11/14/11 08:40	11/18/11 23:43	5
3,3'-Dichlorobenzidine	ND		4.9	0.54	ug/L		11/14/11 08:40	11/18/11 23:43	5
3-Nitroaniline	ND		24	1.6	ug/L		11/14/11 08:40	11/18/11 23:43	5
Fluoranthene	0.79	J	0.97	0.079	ug/L		11/14/11 08:40	11/18/11 23:43	5
Fluorene	3.5		0.97	0.10	ug/L		11/14/11 08:40	11/18/11 23:43	5
Hexachlorobenzene	ND		0.97	0.089	ug/L		11/14/11 08:40	11/18/11 23:43	5
Hexachlorobutadiene	ND		0.97	0.081	ug/L		11/14/11 08:40	11/18/11 23:43	5
Hexachlorocyclopentadiene	ND		4.9	0.25	ug/L		11/14/11 08:40	11/18/11 23:43	5
Hexachloroethane	ND		4.9	0.30	ug/L		11/14/11 08:40	11/18/11 23:43	5
Indeno[1,2,3-cd]pyrene	ND		0.97	0.097	ug/L		11/14/11 08:40	11/18/11 23:43	5
Isophorone	ND		4.9	0.31	ug/L		11/14/11 08:40	11/18/11 23:43	5
Naphthalene	100		0.97	0.068	ug/L		11/14/11 08:40	11/18/11 23:43	5
Nitrobenzene	ND		9.7	0.41	ug/L		11/14/11 08:40	11/18/11 23:43	5
N-Nitrosodiphenylamine	ND		4.9	0.41	ug/L		11/14/11 08:40	11/18/11 23:43	5
N-Nitrosodi-n-propylamine	ND		0.97	0.15	ug/L		11/14/11 08:40	11/18/11 23:43	5
Pyrene	0.61	J	0.97	0.076	ug/L		11/14/11 08:40	11/18/11 23:43	5
Phenol	0.48	J	0.97	0.28	ug/L		11/14/11 08:40	11/18/11 23:43	5
Phenanthrene	3.8		0.97	0.21	ug/L		11/14/11 08:40	11/18/11 23:43	5
Pentachlorophenol	ND		4.9	0.32	ug/L		11/14/11 08:40	11/18/11 23:43	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		16 - 122	11/14/11 08:40	11/18/11 23:43	5
2-Fluorobiphenyl	49		19 - 107	11/14/11 08:40	11/18/11 23:43	5
2-Fluorophenol	41		10 - 111	11/14/11 08:40	11/18/11 23:43	5
Nitrobenzene-d5	44		23 - 112	11/14/11 08:40	11/18/11 23:43	5
Phenol-d5	43		15 - 112	11/14/11 08:40	11/18/11 23:43	5
Terphenyl-d14	41		10 - 132	11/14/11 08:40	11/18/11 23:43	5

Method: 6010B - Lead

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	26	J	200	9.7	ug/L		11/11/11 09:31	11/14/11 14:44	1
Antimony	ND		10	1.3	ug/L		11/11/11 09:31	11/14/11 14:44	1
Arsenic	7.1	J	10	2.7	ug/L		11/11/11 09:31	11/14/11 14:44	1
Barium	100	J	200	0.62	ug/L		11/11/11 09:31	11/14/11 14:44	1
Boron	630		200	1.3	ug/L		11/11/11 09:31	11/14/11 14:44	1
Beryllium	0.40	J	4.0	0.23	ug/L		11/11/11 09:31	11/14/11 14:44	1
Cadmium	ND		5.0	0.13	ug/L		11/11/11 09:31	11/14/11 14:44	1
Calcium	200000		5000	9.7	ug/L		11/11/11 09:31	11/14/11 14:44	1
Chromium	1.7	J	5.0	0.57	ug/L		11/11/11 09:31	11/14/11 14:44	1
Cobalt	ND		50	0.40	ug/L		11/11/11 09:31	11/14/11 14:44	1
Copper	ND		25	2.7	ug/L		11/11/11 09:31	11/14/11 14:44	1
Iron	220		100	12	ug/L		11/11/11 09:31	11/14/11 14:44	1
Lead	ND		3.0	1.3	ug/L		11/11/11 09:31	11/14/11 14:44	1
Magnesium	2100	J	5000	21	ug/L		11/11/11 09:31	11/14/11 14:44	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-1W-11-9-11

Lab Sample ID: 180-5712-2

Date Collected: 11/09/11 14:00

Matrix: Water

Date Received: 11/09/11 15:19

Method: 6010B - Lead (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	28		15	0.68	ug/L		11/11/11 09:31	11/14/11 14:44	1
Nickel	ND		40	1.6	ug/L		11/11/11 09:31	11/14/11 14:44	1
Potassium	16000		5000	750	ug/L		11/11/11 09:31	11/14/11 14:44	1
Selenium	28		5.0	3.0	ug/L		11/11/11 09:31	11/14/11 14:44	1
Silver	ND		5.0	0.68	ug/L		11/11/11 09:31	11/14/11 14:44	1
Sodium	260000		5000	220	ug/L		11/11/11 09:31	11/14/11 14:44	1
Thallium	ND		10	2.4	ug/L		11/11/11 09:31	11/14/11 14:44	1
Vanadium	3.1	J	50	1.9	ug/L		11/11/11 09:31	11/14/11 14:44	1
Zinc	5.4	J B	20	2.5	ug/L		11/11/11 09:31	11/14/11 14:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.038	ug/L		11/29/11 13:52	11/29/11 18:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	2.3	J	4.8	1.4	mg/L		11/17/11 17:19	11/18/11 16:27	1
Ammonia, distilled	2.1		0.10	0.033	mg/L		11/15/11 10:00	11/15/11 14:56	1
Chemical Oxygen Demand	46		10	3.9	mg/L			11/11/11 05:53	1
Cyanide, Total	330		10	1.5	ug/L		11/11/11 12:00	11/14/11 09:16	1
pH	9.74	HF	0.100	0.100	SU			11/10/11 12:42	1
Total Suspended Solids	ND		4.0	2.0	mg/L			11/10/11 12:16	1

Client Sample ID: B-3(6')-11/10/11

Lab Sample ID: 180-5830-1

Date Collected: 11/10/11 09:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		24	6.0	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Benzene	ND		6.0	0.81	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Bromodichloromethane	ND		6.0	0.67	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Bromoform	ND		6.0	0.53	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Bromomethane	ND		6.0	0.88	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
2-Butanone (MEK)	ND		6.0	1.1	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Carbon disulfide	ND		6.0	0.61	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Carbon tetrachloride	ND		6.0	0.53	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Chlorobenzene	ND		6.0	0.91	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Chloroethane	ND		6.0	1.9	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Chloroform	ND		6.0	0.70	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Chloromethane	ND		6.0	1.0	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Dibromochloromethane	ND		6.0	0.85	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,1-Dichloroethane	ND		6.0	0.69	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,2-Dichloroethane	ND		6.0	0.73	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,1-Dichloroethene	ND		6.0	1.0	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Acetonitrile	ND		120	27	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,2-Dichloropropane	ND		6.0	0.65	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
cis-1,3-Dichloropropene	ND		6.0	0.81	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
trans-1,3-Dichloropropene	ND		6.0	0.71	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Ethylbenzene	ND		6.0	0.77	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(6')-11/10/11

Lab Sample ID: 180-5830-1

Date Collected: 11/10/11 09:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		6.0	0.83	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Methylene Chloride	4.3	J B	6.0	0.80	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
4-Methyl-2-pentanone (MIBK)	ND		6.0	0.78	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Bromochloromethane	ND		6.0	0.82	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Styrene	ND		6.0	0.84	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,1,2,2-Tetrachloroethane	ND		6.0	0.86	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Tetrachloroethene	ND		6.0	0.81	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,1,1-Trichloroethane	ND		6.0	0.58	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,1,2-Trichloroethane	ND		6.0	0.99	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Trichloroethene	ND		6.0	0.79	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Vinyl chloride	ND		6.0	0.56	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Xylenes, Total	ND		18	2.7	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Cyclohexane	ND		6.0	0.44	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,2-Dibromo-3-Chloropropane	ND		6.0	0.90	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,2-Dibromoethane (EDB)	ND		6.0	1.0	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Dichlorodifluoromethane	ND		6.0	0.80	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
cis-1,2-Dichloroethene	ND		6.0	0.84	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
trans-1,2-Dichloroethene	ND		6.0	0.71	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Isopropylbenzene	ND		6.0	0.81	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Methyl acetate	ND		6.0	1.1	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Methylcyclohexane	ND		6.0	0.87	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Methyl tert-butyl ether	ND		6.0	0.89	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Trichlorofluoromethane	ND		6.0	1.1	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	1.3	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,2-Dichlorobenzene	ND		6.0	0.95	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,3-Dichlorobenzene	ND		6.0	0.78	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,4-Dichlorobenzene	ND		6.0	0.76	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,2,4-Trichlorobenzene	ND		6.0	1.1	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Toluene	ND		6.0	0.87	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
N-Propylbenzene	ND		6.0	0.91	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,2,3-Trichloropropane	ND		6.0	1.1	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,3,5-Trimethylbenzene	ND		6.0	0.80	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
tert-Butylbenzene	ND		6.0	0.84	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
1,2,4-Trimethylbenzene	ND		6.0	0.78	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
sec-Butylbenzene	ND		6.0	0.94	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
n-Butylbenzene	ND		6.0	0.96	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Hexachlorobutadiene	ND		6.0	1.4	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Naphthalene	ND		6.0	1.2	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Acrolein	ND		120	8.4	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Acrylonitrile	ND		120	12	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Methacrylonitrile	ND		6.0	0.35	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Isobutyl alcohol	ND		240	31	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Methyl methacrylate	ND		6.0	0.82	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Ethyl methacrylate	ND		6.0	0.51	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Vinyl acetate	ND		6.0	0.42	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1
Hexane	ND		6.0	1.2	ug/Kg	☼	11/17/11 04:49	11/17/11 09:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		52 - 124	11/17/11 04:49	11/17/11 09:40	1
Toluene-d8 (Surr)	98		72 - 127	11/17/11 04:49	11/17/11 09:40	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(6')-11/10/11

Lab Sample ID: 180-5830-1

Date Collected: 11/10/11 09:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		63 - 120	11/17/11 04:49	11/17/11 09:40	1
Dibromofluoromethane (Surr)	105		68 - 121	11/17/11 04:49	11/17/11 09:40	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.38	0.029	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Acenaphthene	0.34		0.078	0.0074	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Acetophenone	0.037	J	0.38	0.032	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Acenaphthylene	0.21		0.078	0.0089	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Anthracene	0.87		0.078	0.0076	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzo[a]anthracene	3.9		0.078	0.0097	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzo[a]pyrene	6.8		0.078	0.0077	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzo[b]fluoranthene	6.7		0.078	0.012	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzo[g,h,i]perylene	6.4		0.078	0.0077	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzo[k]fluoranthene	2.8		0.078	0.016	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Bis(2-chloroethyl)ether	ND		0.078	0.010	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Bis(2-chloroethoxy)methane	ND		0.38	0.025	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2,2'-oxybis[1-chloropropane]	ND		0.078	0.0083	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Bis(2-ethylhexyl) phthalate	0.10	J	0.78	0.062	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
4-Bromophenyl phenyl ether	ND		0.38	0.034	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Butyl benzyl phthalate	ND		0.38	0.053	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Carbazole	0.48		0.078	0.0071	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
4-Chloroaniline	ND		0.38	0.031	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2-Chloronaphthalene	ND		0.078	0.0081	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
4-Chlorophenyl phenyl ether	ND		0.38	0.043	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Chrysene	4.7		0.078	0.0092	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Dibenz(a,h)anthracene	2.2		0.078	0.0086	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Di-n-butyl phthalate	ND		0.38	0.048	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
3,3'-Dichlorobenzidine	ND		0.38	0.041	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Diethyl phthalate	ND		0.38	0.042	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Dimethyl phthalate	ND		0.38	0.042	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2,4-Dinitrotoluene	ND		0.38	0.031	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2,6-Dinitrotoluene	ND		0.38	0.040	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Di-n-octyl phthalate	ND		0.38	0.041	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Fluoranthene	4.7		0.078	0.0083	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Fluorene	0.28		0.078	0.010	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Hexachlorobenzene	ND		0.078	0.0082	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
3,3'-Dimethylbenzidine	ND		2.0	0.021	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Hexachlorobutadiene	ND		0.078	0.0087	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Hexachlorocyclopentadiene	ND		0.38	0.042	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Hexachloroethane	ND		0.38	0.028	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Indeno[1,2,3-cd]pyrene	5.0		0.078	0.0080	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Isophorone	ND		0.38	0.029	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2-Methylnaphthalene	0.58		0.078	0.0070	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Naphthalene	0.60		0.078	0.0067	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2-Nitroaniline	ND		2.0	0.17	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
3-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
4-Nitroaniline	ND		2.0	0.16	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Nitrobenzene	ND		0.78	0.032	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
N-Nitrosodi-n-propylamine	ND		0.078	0.0091	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(6')-11/10/11

Lab Sample ID: 180-5830-1

Date Collected: 11/10/11 09:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 85.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		0.38	0.036	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Phenanthrene	2.9		0.078	0.012	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Pyrene	4.8		0.078	0.0078	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
4-Chloro-3-methylphenol	ND		0.38	0.036	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2-Chlorophenol	ND		0.38	0.032	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Aniline	ND		0.38	0.030	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2-Methylphenol	0.073	J	0.38	0.027	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Methylphenol, 3 & 4	0.19	J	0.38	0.038	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2,4-Dichlorophenol	ND		0.078	0.0078	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2,4-Dimethylphenol	0.090	J	0.38	0.060	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2,4-Dinitrophenol	ND		2.0	0.46	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
4,6-Dinitro-2-methylphenol	ND		2.0	0.16	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2-Nitrophenol	ND		0.38	0.043	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzyl alcohol	ND		0.38	0.047	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
4-Nitrophenol	ND		2.0	0.14	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Pentachlorophenol	ND		0.38	0.035	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Phenol	0.080		0.078	0.0091	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2,4,5-Trichlorophenol	ND		0.38	0.041	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
2,4,6-Trichlorophenol	ND		0.38	0.058	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
1,1'-Biphenyl	0.11	J	0.38	0.034	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Caprolactam	ND		2.0	0.29	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzaldehyde	ND		0.38	0.058	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Atrazine	ND	*	0.38	0.038	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzoic acid	ND		2.0	0.16	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
Benzidine	ND		7.8	1.6	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
1,4-Dioxane	ND		0.78	0.044	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.38	0.049	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1
o-Toluidine	ND		0.38	0.029	mg/Kg	☼	11/15/11 05:58	11/17/11 20:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	64		25 - 104	11/15/11 05:58	11/17/11 20:20	1
2-Fluorobiphenyl	65		35 - 105	11/15/11 05:58	11/17/11 20:20	1
Terphenyl-d14	65		25 - 127	11/15/11 05:58	11/17/11 20:20	1
Phenol-d5	71		25 - 105	11/15/11 05:58	11/17/11 20:20	1
2-Fluorophenol	63		39 - 103	11/15/11 05:58	11/17/11 20:20	1
2,4,6-Tribromophenol	52		35 - 124	11/15/11 05:58	11/17/11 20:20	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.020	0.0026	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
4,4'-DDE	ND		0.020	0.0030	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
4,4'-DDT	ND		0.020	0.0029	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Aldrin	ND		0.020	0.0035	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
alpha-BHC	ND		0.020	0.0032	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
beta-BHC	ND		0.020	0.0051	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
delta-BHC	ND		0.020	0.0030	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Dieldrin	ND		0.020	0.0033	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Endosulfan I	ND		0.020	0.0037	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Endosulfan II	ND		0.020	0.0035	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Endosulfan sulfate	ND		0.020	0.0020	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(6')-11/10/11

Lab Sample ID: 180-5830-1

Date Collected: 11/10/11 09:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 85.2

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	ND		0.020	0.0038	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Diallate	ND		0.39	0.033	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
gamma-BHC (Lindane)	0.031		0.020	0.0034	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
gamma-Chlordane	ND		0.020	0.0039	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Heptachlor	ND		0.020	0.0044	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Heptachlor epoxide	ND		0.020	0.0038	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Methoxychlor	0.0092	J p	0.039	0.0041	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Toxaphene	ND		0.79	0.13	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10
Chlordane (technical)	ND		0.20	0.0086	mg/Kg	☼	11/14/11 04:19	11/16/11 11:20	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	13	p X D	45 - 130	11/14/11 04:19	11/16/11 11:20	10
Tetrachloro-m-xylene	74	D	45 - 130	11/14/11 04:19	11/16/11 11:20	10
DCB Decachlorobiphenyl (Surr)	96	D	45 - 130	11/14/11 04:19	11/16/11 11:20	10
DCB Decachlorobiphenyl (Surr)	0.5	p X D	45 - 130	11/14/11 04:19	11/16/11 11:20	10

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0029	mg/Kg	☼	11/14/11 04:19	11/16/11 18:21	1
PCB-1221	ND		0.020	0.0037	mg/Kg	☼	11/14/11 04:19	11/16/11 18:21	1
PCB-1232	ND		0.020	0.0034	mg/Kg	☼	11/14/11 04:19	11/16/11 18:21	1
PCB-1242	ND		0.020	0.0032	mg/Kg	☼	11/14/11 04:19	11/16/11 18:21	1
PCB-1248	ND		0.020	0.0019	mg/Kg	☼	11/14/11 04:19	11/16/11 18:21	1
PCB-1254	ND		0.020	0.0028	mg/Kg	☼	11/14/11 04:19	11/16/11 18:21	1
PCB-1260	ND		0.020	0.0028	mg/Kg	☼	11/14/11 04:19	11/16/11 18:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		35 - 140	11/14/11 04:19	11/16/11 18:21	1
DCB Decachlorobiphenyl (Surr)	90		35 - 140	11/14/11 04:19	11/16/11 18:21	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.094	0.0064	mg/Kg	☼	11/15/11 10:04	11/18/11 09:27	20
2,4,5-T	ND		0.023	0.0029	mg/Kg	☼	11/15/11 10:04	11/18/11 09:27	20
Silvex (2,4,5-TP)	ND		0.023	0.0025	mg/Kg	☼	11/15/11 10:04	11/18/11 09:27	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	46		42 - 140	11/15/11 10:04	11/18/11 09:03	20
2,4-Dichlorophenylacetic acid	49		42 - 140	11/15/11 10:04	11/18/11 09:27	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.1	0.18	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Arsenic	5.1		1.1	0.25	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Barium	260	B	22	0.056	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Boron	86		22	0.29	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Beryllium	4.9	B	0.45	0.017	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Cadmium	ND		0.56	0.027	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Chromium	16	B	0.56	0.095	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Cobalt	1.8	J	5.6	0.10	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Copper	13		2.8	0.38	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Lead	12		0.34	0.16	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1

Client Sample Results

Client: GAI Consultants
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TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(6')-11/10/11

Lab Sample ID: 180-5830-1

Date Collected: 11/10/11 09:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 85.2

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2100		1.7	0.054	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Nickel	9.3		4.5	0.43	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Selenium	3.4		0.56	0.23	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Silver	ND		0.56	0.065	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Thallium	ND		1.1	0.23	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Vanadium	7.5		5.6	0.21	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Zinc	57	B	2.2	0.25	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1
Tin	1.9	J	11	0.60	mg/Kg	☼	11/28/11 11:45	11/29/11 20:20	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.037	0.012	mg/Kg	☼	11/30/11 07:50	11/30/11 12:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	16		0.013	0.0021	mg/Kg			12/07/11 10:55	1
Cr (VI)	ND		0.46	0.11	mg/Kg	☼	11/29/11 12:30	12/02/11 12:50	1
Percent Moisture	15		0.10	0.10	%			11/12/11 12:14	1
Cyanide, Total	5.4		2.9	0.58	mg/Kg	☼	11/18/11 13:22	11/19/11 17:45	5
Cyanide, Weak Acid Dissociable	0.83	^	0.59	0.19	mg/Kg	☼	11/23/11 10:23	11/23/11 15:43	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.47	0.12	mg/Kg	☼	11/29/11 16:00	12/02/11 15:03	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30	B	9.9	2.2	mg/Kg			11/16/11 23:20	1
Nitrate as N	25		0.49	0.15	mg/Kg			11/16/11 23:20	1
Nitrite as N	ND		0.49	0.16	mg/Kg			11/16/11 23:20	1
Sulfate	980	B	9.9	1.2	mg/Kg			11/16/11 23:20	1

Client Sample ID: B-3(16')-11/10/11

Lab Sample ID: 180-5830-2

Date Collected: 11/10/11 10:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 88.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		18	4.6	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Benzene	ND		4.6	0.62	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Bromodichloromethane	ND		4.6	0.52	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Bromoform	ND		4.6	0.41	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Bromomethane	ND		4.6	0.68	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
2-Butanone (MEK)	ND		4.6	0.81	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Carbon disulfide	ND		4.6	0.47	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Carbon tetrachloride	ND		4.6	0.41	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Chlorobenzene	ND		4.6	0.70	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Chloroethane	ND		4.6	1.4	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Chloroform	ND		4.6	0.54	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Chloromethane	ND		4.6	0.79	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(16')-11/10/11

Lab Sample ID: 180-5830-2

Date Collected: 11/10/11 10:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 88.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		4.6	0.65	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,1-Dichloroethane	ND		4.6	0.53	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,2-Dichloroethane	ND		4.6	0.57	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,1-Dichloroethene	ND		4.6	0.78	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Acetonitrile	ND		92	21	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,2-Dichloropropane	ND		4.6	0.50	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
cis-1,3-Dichloropropene	ND		4.6	0.63	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
trans-1,3-Dichloropropene	ND		4.6	0.55	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Ethylbenzene	ND		4.6	0.59	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
2-Hexanone	ND		4.6	0.64	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Methylene Chloride	2.7	J B	4.6	0.62	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
4-Methyl-2-pentanone (MIBK)	ND		4.6	0.60	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Bromochloromethane	ND		4.6	0.63	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Styrene	ND		4.6	0.65	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.66	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Tetrachloroethene	ND		4.6	0.63	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,1,1-Trichloroethane	ND		4.6	0.45	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,1,2-Trichloroethane	ND		4.6	0.77	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Trichloroethene	ND		4.6	0.61	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Vinyl chloride	ND		4.6	0.43	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Xylenes, Total	ND		14	2.1	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Cyclohexane	ND		4.6	0.34	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,2-Dibromo-3-Chloropropane	ND		4.6	0.69	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,2-Dibromoethane (EDB)	ND		4.6	0.80	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Dichlorodifluoromethane	ND		4.6	0.61	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
cis-1,2-Dichloroethene	ND		4.6	0.65	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
trans-1,2-Dichloroethene	ND		4.6	0.55	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Isopropylbenzene	ND		4.6	0.63	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Methyl acetate	ND		4.6	0.83	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Methylcyclohexane	ND		4.6	0.67	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Methyl tert-butyl ether	ND		4.6	0.69	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Trichlorofluoromethane	ND		4.6	0.85	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	0.98	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,2-Dichlorobenzene	ND		4.6	0.74	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,3-Dichlorobenzene	ND		4.6	0.61	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,4-Dichlorobenzene	ND		4.6	0.59	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,2,4-Trichlorobenzene	ND		4.6	0.81	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Toluene	ND		4.6	0.67	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
N-Propylbenzene	ND		4.6	0.71	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,2,3-Trichloropropane	ND		4.6	0.86	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,3,5-Trimethylbenzene	ND		4.6	0.62	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
tert-Butylbenzene	ND		4.6	0.65	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
1,2,4-Trimethylbenzene	ND		4.6	0.60	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
sec-Butylbenzene	ND		4.6	0.72	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
n-Butylbenzene	ND		4.6	0.74	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Hexachlorobutadiene	ND		4.6	1.0	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Naphthalene	ND		4.6	0.93	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Acrolein	ND		92	6.5	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Acrylonitrile	ND		92	9.6	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Methacrylonitrile	ND		4.6	0.27	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(16')-11/10/11

Lab Sample ID: 180-5830-2

Date Collected: 11/10/11 10:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 88.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isobutyl alcohol	ND		180	24	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Methyl methacrylate	ND		4.6	0.63	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Ethyl methacrylate	ND		4.6	0.39	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Vinyl acetate	ND		4.6	0.33	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1
Hexane	ND		4.6	0.93	ug/Kg	☼	11/17/11 04:49	11/17/11 10:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		52 - 124	11/17/11 04:49	11/17/11 10:03	1
Toluene-d8 (Surr)	101		72 - 127	11/17/11 04:49	11/17/11 10:03	1
4-Bromofluorobenzene (Surr)	101		63 - 120	11/17/11 04:49	11/17/11 10:03	1
Dibromofluoromethane (Surr)	103		68 - 121	11/17/11 04:49	11/17/11 10:03	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.37	0.029	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Acenaphthene	0.024	J	0.076	0.0073	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Acetophenone	ND		0.37	0.031	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Acenaphthylene	ND		0.076	0.0087	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Anthracene	0.054	J	0.076	0.0074	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzo[a]anthracene	0.28		0.076	0.0095	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzo[a]pyrene	0.43		0.076	0.0076	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzo[b]fluoranthene	0.43		0.076	0.012	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzo[g,h,i]perylene	0.25		0.076	0.0075	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzo[k]fluoranthene	0.24		0.076	0.015	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Bis(2-chloroethyl)ether	ND		0.076	0.010	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Bis(2-chloroethoxy)methane	ND		0.37	0.025	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2,2'-oxybis[1-chloropropane]	ND		0.076	0.0082	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Bis(2-ethylhexyl) phthalate	ND		0.76	0.061	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
4-Bromophenyl phenyl ether	ND		0.37	0.033	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Butyl benzyl phthalate	ND		0.37	0.052	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Carbazole	0.034	J	0.076	0.0070	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
4-Chloroaniline	ND		0.37	0.030	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2-Chloronaphthalene	ND		0.076	0.0079	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
4-Chlorophenyl phenyl ether	ND		0.37	0.042	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Chrysene	0.33		0.076	0.0090	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Dibenz(a,h)anthracene	0.078		0.076	0.0084	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Di-n-butyl phthalate	ND		0.37	0.047	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
3,3'-Dichlorobenzidine	ND		0.37	0.040	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Diethyl phthalate	ND		0.37	0.041	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Dimethyl phthalate	ND		0.37	0.041	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2,4-Dinitrotoluene	ND		0.37	0.031	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2,6-Dinitrotoluene	ND		0.37	0.039	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Di-n-octyl phthalate	ND		0.37	0.040	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Fluoranthene	0.34		0.076	0.0081	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Fluorene	0.022	J	0.076	0.010	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Hexachlorobenzene	ND		0.076	0.0081	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
3,3'-Dimethylbenzidine	ND		1.9	0.020	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Hexachlorobutadiene	ND		0.076	0.0085	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Hexachlorocyclopentadiene	ND		0.37	0.041	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Hexachloroethane	ND		0.37	0.027	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Indeno[1,2,3-cd]pyrene	0.20		0.076	0.0078	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(16')-11/10/11

Lab Sample ID: 180-5830-2

Date Collected: 11/10/11 10:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 88.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		0.37	0.029	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2-Methylnaphthalene	0.032	J	0.076	0.0068	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Naphthalene	0.053	J	0.076	0.0065	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2-Nitroaniline	ND		1.9	0.17	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
3-Nitroaniline	ND		1.9	0.16	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
4-Nitroaniline	ND		1.9	0.15	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Nitrobenzene	ND		0.76	0.032	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
N-Nitrosodi-n-propylamine	ND		0.076	0.0089	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
N-Nitrosodiphenylamine	ND		0.37	0.035	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Phenanthrene	0.19		0.076	0.012	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Pyrene	0.31		0.076	0.0077	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
4-Chloro-3-methylphenol	ND		0.37	0.035	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2-Chlorophenol	ND		0.37	0.031	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Aniline	ND		0.37	0.029	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2-Methylphenol	ND		0.37	0.026	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Methylphenol, 3 & 4	ND		0.37	0.037	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2,4-Dichlorophenol	ND		0.076	0.0076	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2,4-Dimethylphenol	ND		0.37	0.059	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2,4-Dinitrophenol	ND		1.9	0.45	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
4,6-Dinitro-2-methylphenol	ND		1.9	0.15	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2-Nitrophenol	ND		0.37	0.042	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzyl alcohol	ND		0.37	0.046	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
4-Nitrophenol	ND		1.9	0.14	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Pentachlorophenol	ND		0.37	0.034	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Phenol	0.034	J	0.076	0.0089	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2,4,5-Trichlorophenol	ND		0.37	0.040	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
2,4,6-Trichlorophenol	ND		0.37	0.057	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
1,1'-Biphenyl	ND		0.37	0.034	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Caprolactam	ND		1.9	0.29	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzaldehyde	ND		0.37	0.057	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Atrazine	ND		0.37	0.037	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzoic acid	ND		1.9	0.16	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
Benzidine	ND		7.6	1.6	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
1,4-Dioxane	ND		0.76	0.043	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.37	0.048	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1
o-Toluidine	ND		0.37	0.028	mg/Kg	☼	11/15/11 05:58	11/21/11 15:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	79		25 - 104	11/15/11 05:58	11/21/11 15:21	1
2-Fluorobiphenyl	75		35 - 105	11/15/11 05:58	11/21/11 15:21	1
Terphenyl-d14	80		25 - 127	11/15/11 05:58	11/21/11 15:21	1
Phenol-d5	90		25 - 105	11/15/11 05:58	11/21/11 15:21	1
2-Fluorophenol	72		39 - 103	11/15/11 05:58	11/21/11 15:21	1
2,4,6-Tribromophenol	35		35 - 124	11/15/11 05:58	11/21/11 15:21	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0019	0.00025	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
4,4'-DDE	ND		0.0019	0.00028	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
4,4'-DDT	ND		0.0019	0.00028	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(16')-11/10/11

Lab Sample ID: 180-5830-2

Date Collected: 11/10/11 10:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 88.1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0019	0.00034	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
alpha-BHC	ND		0.0019	0.00031	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
beta-BHC	ND		0.0019	0.00049	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
delta-BHC	ND		0.0019	0.00029	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Dieldrin	ND		0.0019	0.00031	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Endosulfan I	ND		0.0019	0.00035	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Endosulfan II	ND		0.0019	0.00033	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Endosulfan sulfate	ND		0.0019	0.00020	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Endrin	ND		0.0019	0.00036	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Diallate	ND		0.037	0.0031	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
gamma-BHC (Lindane)	0.0042		0.0019	0.00033	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
gamma-Chlordane	ND		0.0019	0.00037	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Heptachlor	ND		0.0019	0.00042	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Heptachlor epoxide	ND		0.0019	0.00037	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Methoxychlor	0.28		0.0037	0.00039	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Toxaphene	ND		0.076	0.013	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1
Chlordane (technical)	ND		0.019	0.00083	mg/Kg	☼	11/14/11 04:19	11/16/11 12:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		45 - 130	11/14/11 04:19	11/16/11 12:17	1
Tetrachloro-m-xylene	77		45 - 130	11/14/11 04:19	11/16/11 12:17	1
DCB Decachlorobiphenyl (Surr)	84		45 - 130	11/14/11 04:19	11/16/11 12:17	1
DCB Decachlorobiphenyl (Surr)	78		45 - 130	11/14/11 04:19	11/16/11 12:17	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0028	mg/Kg	☼	11/14/11 04:19	11/16/11 18:50	1
PCB-1221	ND		0.019	0.0036	mg/Kg	☼	11/14/11 04:19	11/16/11 18:50	1
PCB-1232	ND		0.019	0.0032	mg/Kg	☼	11/14/11 04:19	11/16/11 18:50	1
PCB-1242	ND		0.019	0.0031	mg/Kg	☼	11/14/11 04:19	11/16/11 18:50	1
PCB-1248	ND		0.019	0.0018	mg/Kg	☼	11/14/11 04:19	11/16/11 18:50	1
PCB-1254	ND		0.019	0.0027	mg/Kg	☼	11/14/11 04:19	11/16/11 18:50	1
PCB-1260	ND		0.019	0.0027	mg/Kg	☼	11/14/11 04:19	11/16/11 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		35 - 140	11/14/11 04:19	11/16/11 18:50	1
DCB Decachlorobiphenyl (Surr)	109		35 - 140	11/14/11 04:19	11/16/11 18:50	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.090	0.0062	mg/Kg	☼	11/15/11 10:04	11/18/11 09:51	20
2,4,5-T	ND		0.023	0.0028	mg/Kg	☼	11/15/11 10:04	11/18/11 09:51	20
Silvex (2,4,5-TP)	ND		0.023	0.0024	mg/Kg	☼	11/15/11 10:04	11/18/11 09:51	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	58		42 - 140	11/15/11 10:04	11/18/11 09:27	20
2,4-Dichlorophenylacetic acid	59		42 - 140	11/15/11 10:04	11/18/11 09:51	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.18	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Arsenic	1.4		1.1	0.24	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1

Client Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Client Sample ID: B-3(16')-11/10/11

Lab Sample ID: 180-5830-2

Date Collected: 11/10/11 10:00

Matrix: Solid

Date Received: 11/11/11 12:30

Percent Solids: 88.1

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	220	B	22	0.054	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Boron	110		22	0.28	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Beryllium	4.7	B	0.43	0.016	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Cadmium	ND		0.54	0.026	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Chromium	5.4	B	1.1	0.18	mg/Kg	☼	11/28/11 11:45	11/30/11 15:09	2
Cobalt	ND		5.4	0.096	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Copper	0.83	J	2.7	0.37	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Lead	0.61		0.32	0.16	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Manganese	2900		3.2	0.10	mg/Kg	☼	11/28/11 11:45	11/30/11 15:09	2
Nickel	0.68	J	4.3	0.41	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Selenium	2.4		1.1	0.45	mg/Kg	☼	11/28/11 11:45	11/30/11 15:09	2
Silver	ND		1.1	0.13	mg/Kg	☼	11/28/11 11:45	11/30/11 15:09	2
Thallium	ND		2.2	0.45	mg/Kg	☼	11/28/11 11:45	11/30/11 15:09	2
Vanadium	11		5.4	0.20	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Zinc	2.2	B	2.2	0.24	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1
Tin	0.87	J	11	0.58	mg/Kg	☼	11/28/11 11:45	11/29/11 20:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.037	0.012	mg/Kg	☼	11/30/11 07:50	11/30/11 12:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	5.4		0.013	0.0021	mg/Kg	—		12/07/11 10:55	1
Cr (VI)	ND		0.46	0.11	mg/Kg	☼	11/29/11 12:30	12/02/11 12:51	1
Percent Moisture	12		0.10	0.10	%			11/12/11 12:14	1
Cyanide, Total	4.9		0.58	0.12	mg/Kg	☼	11/18/11 13:22	11/19/11 17:32	1
Cyanide, Weak Acid Dissociable	0.24	J ^	0.57	0.18	mg/Kg	☼	11/23/11 10:23	11/23/11 15:25	1

General Chemistry - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.46	0.11	mg/Kg	☼	11/29/11 16:00	12/02/11 15:04	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74	B	9.9	2.2	mg/Kg	—		11/16/11 23:48	1
Nitrate as N	8.3		0.49	0.15	mg/Kg			11/16/11 23:48	1
Nitrite as N	0.23	J	0.49	0.16	mg/Kg			11/16/11 23:48	1
Sulfate	380	B	9.9	1.2	mg/Kg			11/16/11 23:48	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-19864/1-A

Matrix: Solid

Analysis Batch: 19871

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19864

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	5.0	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Benzene	ND		5.0	0.68	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Bromodichloromethane	ND		5.0	0.56	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Bromoform	ND		5.0	0.44	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Bromomethane	ND		5.0	0.74	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
2-Butanone (MEK)	ND		5.0	0.88	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Carbon disulfide	ND		5.0	0.51	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Carbon tetrachloride	ND		5.0	0.45	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Chlorobenzene	ND		5.0	0.76	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Chloroform	ND		5.0	0.58	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Chloromethane	ND		5.0	0.85	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Dibromochloromethane	ND		5.0	0.71	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,1-Dichloroethane	ND		5.0	0.58	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,2-Dichloroethane	ND		5.0	0.61	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,1-Dichloroethene	ND		5.0	0.85	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Acetonitrile	ND		100	23	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,2-Dichloropropane	ND		5.0	0.54	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
cis-1,3-Dichloropropene	ND		5.0	0.68	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Ethylbenzene	ND		5.0	0.64	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
2-Hexanone	ND		5.0	0.69	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Methylene Chloride	0.978	J	5.0	0.67	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.65	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Styrene	ND		5.0	0.71	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.72	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Tetrachloroethene	ND		5.0	0.68	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,1,1-Trichloroethane	ND		5.0	0.49	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,1,2-Trichloroethane	ND		5.0	0.83	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Trichloroethene	ND		5.0	0.66	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Vinyl chloride	ND		5.0	0.47	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Xylenes, Total	ND		15	2.2	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Cyclohexane	ND		5.0	0.37	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.75	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,2-Dibromoethane (EDB)	ND		5.0	0.86	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Dichlorodifluoromethane	ND		5.0	0.67	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
cis-1,2-Dichloroethene	ND		5.0	0.70	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
trans-1,2-Dichloroethene	ND		5.0	0.60	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Methyl acetate	ND		5.0	0.90	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Methylcyclohexane	ND		5.0	0.73	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Methyl tert-butyl ether	ND		5.0	0.75	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Trichlorofluoromethane	ND		5.0	0.92	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,2-Dichlorobenzene	ND		5.0	0.80	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,3-Dichlorobenzene	ND		5.0	0.66	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,4-Dichlorobenzene	ND		5.0	0.64	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,2,4-Trichlorobenzene	ND		5.0	0.88	ug/Kg		11/07/11 05:10	11/07/11 08:01	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-19864/1-A

Matrix: Solid

Analysis Batch: 19871

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19864

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	0.73	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
N-Propylbenzene	ND		5.0	0.76	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,2,3-Trichloropropane	ND		5.0	0.93	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,3,5-Trimethylbenzene	ND		5.0	0.67	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
tert-Butylbenzene	ND		5.0	0.71	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
1,2,4-Trimethylbenzene	ND		5.0	0.65	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
sec-Butylbenzene	ND		5.0	0.78	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
n-Butylbenzene	ND		5.0	0.80	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Hexachlorobutadiene	ND		5.0	1.1	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Naphthalene	1.07	J	5.0	1.0	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Acrolein	ND		100	7.0	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Acrylonitrile	ND		100	10	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Methacrylonitrile	ND		5.0	0.30	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Isobutyl alcohol	ND		200	26	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Methyl methacrylate	ND		5.0	0.69	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Ethyl methacrylate	ND		5.0	0.42	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Vinyl acetate	ND		5.0	0.35	ug/Kg		11/07/11 05:10	11/07/11 08:01	1
Hexane	ND		5.0	1.0	ug/Kg		11/07/11 05:10	11/07/11 08:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		52 - 124	11/07/11 05:10	11/07/11 08:01	1
Toluene-d8 (Surr)	102		72 - 127	11/07/11 05:10	11/07/11 08:01	1
4-Bromofluorobenzene (Surr)	98		63 - 120	11/07/11 05:10	11/07/11 08:01	1
Dibromofluoromethane (Surr)	99		68 - 121	11/07/11 05:10	11/07/11 08:01	1

Lab Sample ID: LCS 180-19864/2-A

Matrix: Solid

Analysis Batch: 19871

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19864

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	50.8		ug/Kg		127	20 - 150
Benzene	40.0	40.9		ug/Kg		102	77 - 120
Bromodichloromethane	40.0	42.3		ug/Kg		106	70 - 125
Bromoform	40.0	38.3		ug/Kg		96	53 - 140
Bromomethane	40.0	35.5		ug/Kg		89	25 - 150
2-Butanone (MEK)	40.0	43.0		ug/Kg		107	35 - 149
Carbon disulfide	40.0	34.3		ug/Kg		86	50 - 127
Carbon tetrachloride	40.0	44.6		ug/Kg		112	69 - 122
Chlorobenzene	40.0	41.7		ug/Kg		104	79 - 120
Chloroethane	40.0	38.1		ug/Kg		95	22 - 150
Chloroform	40.0	40.6		ug/Kg		102	72 - 120
Chloromethane	40.0	31.5		ug/Kg		79	44 - 131
Dibromochloromethane	40.0	44.6		ug/Kg		111	70 - 132
1,1-Dichloroethane	40.0	40.6		ug/Kg		101	66 - 124
1,2-Dichloroethane	40.0	39.8		ug/Kg		99	61 - 127
1,1-Dichloroethene	40.0	44.0		ug/Kg		110	59 - 129
1,2-Dichloropropane	40.0	40.7		ug/Kg		102	72 - 122
cis-1,3-Dichloropropene	40.0	41.5		ug/Kg		104	73 - 120
trans-1,3-Dichloropropene	40.0	42.8		ug/Kg		107	74 - 129

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-19864/2-A

Matrix: Solid

Analysis Batch: 19871

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19864

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	40.0	41.8		ug/Kg		104	78 - 125
2-Hexanone	40.0	48.0		ug/Kg		120	32 - 150
Methylene Chloride	40.0	40.0		ug/Kg		100	58 - 127
4-Methyl-2-pentanone (MIBK)	40.0	44.2		ug/Kg		110	44 - 148
Bromochloromethane	40.0	41.2		ug/Kg		103	67 - 126
Styrene	40.0	42.4		ug/Kg		106	83 - 129
1,1,2,2-Tetrachloroethane	40.0	43.2		ug/Kg		108	60 - 139
Tetrachloroethene	40.0	41.2		ug/Kg		103	78 - 129
1,1,1-Trichloroethane	40.0	45.1		ug/Kg		113	67 - 126
1,1,2-Trichloroethane	40.0	39.8		ug/Kg		100	70 - 128
Trichloroethene	40.0	40.7		ug/Kg		102	76 - 119
Vinyl chloride	40.0	37.1		ug/Kg		93	63 - 124
Cyclohexane	40.0	42.8		ug/Kg		107	64 - 130
1,2-Dibromo-3-Chloropropane	40.0	38.9		ug/Kg		97	35 - 136
1,2-Dibromoethane (EDB)	40.0	41.9		ug/Kg		105	70 - 131
Dichlorodifluoromethane	40.0	28.1		ug/Kg		70	25 - 150
cis-1,2-Dichloroethene	40.0	41.0		ug/Kg		102	80 - 118
trans-1,2-Dichloroethene	40.0	42.9		ug/Kg		107	77 - 121
Isopropylbenzene	40.0	42.9		ug/Kg		107	70 - 133
Methyl acetate	40.0	37.2		ug/Kg		93	27 - 142
Methylcyclohexane	40.0	41.0		ug/Kg		102	66 - 135
Methyl tert-butyl ether	40.0	41.0		ug/Kg		103	48 - 132
Trichlorofluoromethane	40.0	35.3		ug/Kg		88	20 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	38.4		ug/Kg		96	55 - 130
1,2-Dichlorobenzene	40.0	41.3		ug/Kg		103	71 - 124
1,3-Dichlorobenzene	40.0	41.5		ug/Kg		104	75 - 118
1,4-Dichlorobenzene	40.0	41.4		ug/Kg		104	77 - 116
1,2,4-Trichlorobenzene	40.0	39.2		ug/Kg		98	51 - 136
Toluene	40.0	41.8		ug/Kg		104	78 - 124
N-Propylbenzene	40.0	42.7		ug/Kg		107	80 - 120
1,2,3-Trichloropropane	40.0	43.0		ug/Kg		108	54 - 135
1,3,5-Trimethylbenzene	40.0	43.6		ug/Kg		109	68 - 133
tert-Butylbenzene	40.0	42.9		ug/Kg		107	74 - 133
1,2,4-Trimethylbenzene	40.0	42.8		ug/Kg		107	80 - 121
sec-Butylbenzene	40.0	44.1		ug/Kg		110	70 - 130
n-Butylbenzene	40.0	43.4		ug/Kg		109	59 - 145
Hexachlorobutadiene	40.0	43.6		ug/Kg		109	42 - 150
Naphthalene	40.0	35.8		ug/Kg		89	31 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		52 - 124
Toluene-d8 (Surr)	98		72 - 127
4-Bromofluorobenzene (Surr)	95		63 - 120
Dibromofluoromethane (Surr)	99		68 - 121

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-19971/1-A

Matrix: Solid

Analysis Batch: 19977

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	5.0	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Benzene	ND		5.0	0.68	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Bromodichloromethane	ND		5.0	0.56	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Bromoform	ND		5.0	0.44	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Bromomethane	ND		5.0	0.74	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
2-Butanone (MEK)	ND		5.0	0.88	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Carbon disulfide	ND		5.0	0.51	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Carbon tetrachloride	ND		5.0	0.45	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Chlorobenzene	ND		5.0	0.76	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Chloroform	ND		5.0	0.58	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Chloromethane	ND		5.0	0.85	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Dibromochloromethane	ND		5.0	0.71	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,1-Dichloroethane	ND		5.0	0.58	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,2-Dichloroethane	ND		5.0	0.61	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,1-Dichloroethene	ND		5.0	0.85	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Acetonitrile	ND		100	23	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,2-Dichloropropane	ND		5.0	0.54	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
cis-1,3-Dichloropropene	ND		5.0	0.68	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Ethylbenzene	ND		5.0	0.64	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
2-Hexanone	ND		5.0	0.69	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Methylene Chloride	1.27	J	5.0	0.67	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.65	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Styrene	ND		5.0	0.71	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.72	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Tetrachloroethene	ND		5.0	0.68	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,1,1-Trichloroethane	ND		5.0	0.49	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,1,2-Trichloroethane	ND		5.0	0.83	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Trichloroethene	ND		5.0	0.66	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Vinyl chloride	ND		5.0	0.47	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Xylenes, Total	ND		15	2.2	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Cyclohexane	ND		5.0	0.37	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.75	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,2-Dibromoethane (EDB)	ND		5.0	0.86	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Dichlorodifluoromethane	ND		5.0	0.67	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
cis-1,2-Dichloroethene	ND		5.0	0.70	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
trans-1,2-Dichloroethene	ND		5.0	0.60	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Methyl acetate	ND		5.0	0.90	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Methylcyclohexane	ND		5.0	0.73	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Methyl tert-butyl ether	ND		5.0	0.75	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Trichlorofluoromethane	ND		5.0	0.92	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,2-Dichlorobenzene	ND		5.0	0.80	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,3-Dichlorobenzene	ND		5.0	0.66	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,4-Dichlorobenzene	ND		5.0	0.64	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,2,4-Trichlorobenzene	ND		5.0	0.88	ug/Kg		11/08/11 04:08	11/08/11 06:18	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-19971/1-A

Matrix: Solid

Analysis Batch: 19977

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	0.73	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
N-Propylbenzene	ND		5.0	0.76	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,2,3-Trichloropropane	ND		5.0	0.93	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,3,5-Trimethylbenzene	ND		5.0	0.67	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
tert-Butylbenzene	ND		5.0	0.71	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
1,2,4-Trimethylbenzene	ND		5.0	0.65	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
sec-Butylbenzene	ND		5.0	0.78	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
n-Butylbenzene	ND		5.0	0.80	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Hexachlorobutadiene	ND		5.0	1.1	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Naphthalene	4.13	J	5.0	1.0	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Acrolein	ND		100	7.0	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Acrylonitrile	ND		100	10	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Methacrylonitrile	ND		5.0	0.30	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Isobutyl alcohol	ND		200	26	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Methyl methacrylate	ND		5.0	0.69	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Ethyl methacrylate	ND		5.0	0.42	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Vinyl acetate	ND		5.0	0.35	ug/Kg		11/08/11 04:08	11/08/11 06:18	1
Hexane	ND		5.0	1.0	ug/Kg		11/08/11 04:08	11/08/11 06:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		52 - 124	11/08/11 04:08	11/08/11 06:18	1
Toluene-d8 (Surr)	100		72 - 127	11/08/11 04:08	11/08/11 06:18	1
4-Bromofluorobenzene (Surr)	101		63 - 120	11/08/11 04:08	11/08/11 06:18	1
Dibromofluoromethane (Surr)	100		68 - 121	11/08/11 04:08	11/08/11 06:18	1

Lab Sample ID: LCS 180-19971/2-A

Matrix: Solid

Analysis Batch: 19977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	62.3	*	ug/Kg		156	20 - 150
Benzene	40.0	38.9		ug/Kg		97	77 - 120
Bromodichloromethane	40.0	40.3		ug/Kg		101	70 - 125
Bromoform	40.0	38.5		ug/Kg		96	53 - 140
Bromomethane	40.0	41.3		ug/Kg		103	25 - 150
2-Butanone (MEK)	40.0	52.3		ug/Kg		131	35 - 149
Carbon disulfide	40.0	37.5		ug/Kg		94	50 - 127
Carbon tetrachloride	40.0	44.3		ug/Kg		111	69 - 122
Chlorobenzene	40.0	39.7		ug/Kg		99	79 - 120
Chloroethane	40.0	42.4		ug/Kg		106	22 - 150
Chloroform	40.0	41.3		ug/Kg		103	72 - 120
Chloromethane	40.0	41.5		ug/Kg		104	44 - 131
Dibromochloromethane	40.0	42.3		ug/Kg		106	70 - 132
1,1-Dichloroethane	40.0	40.7		ug/Kg		102	66 - 124
1,2-Dichloroethane	40.0	40.6		ug/Kg		101	61 - 127
1,1-Dichloroethene	40.0	43.1		ug/Kg		108	59 - 129
1,2-Dichloropropane	40.0	38.1		ug/Kg		95	72 - 122
cis-1,3-Dichloropropene	40.0	38.1		ug/Kg		95	73 - 120
trans-1,3-Dichloropropene	40.0	41.0		ug/Kg		103	74 - 129

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-19971/2-A

Matrix: Solid

Analysis Batch: 19977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	40.0	40.0		ug/Kg		100	78 - 125
2-Hexanone	40.0	57.6		ug/Kg		144	32 - 150
Methylene Chloride	40.0	39.9		ug/Kg		100	58 - 127
4-Methyl-2-pentanone (MIBK)	40.0	45.4		ug/Kg		114	44 - 148
Bromochloromethane	40.0	41.3		ug/Kg		103	67 - 126
Styrene	40.0	40.7		ug/Kg		102	83 - 129
1,1,2,2-Tetrachloroethane	40.0	41.0		ug/Kg		103	60 - 139
Tetrachloroethene	40.0	40.4		ug/Kg		101	78 - 129
1,1,1-Trichloroethane	40.0	44.9		ug/Kg		112	67 - 126
1,1,2-Trichloroethane	40.0	38.0		ug/Kg		95	70 - 128
Trichloroethene	40.0	38.7		ug/Kg		97	76 - 119
Vinyl chloride	40.0	40.8		ug/Kg		102	63 - 124
Cyclohexane	40.0	42.0		ug/Kg		105	64 - 130
1,2-Dibromo-3-Chloropropane	40.0	37.9		ug/Kg		95	35 - 136
1,2-Dibromoethane (EDB)	40.0	39.4		ug/Kg		99	70 - 131
Dichlorodifluoromethane	40.0	47.6		ug/Kg		119	25 - 150
cis-1,2-Dichloroethene	40.0	41.9		ug/Kg		105	80 - 118
trans-1,2-Dichloroethene	40.0	42.0		ug/Kg		105	77 - 121
Isopropylbenzene	40.0	41.7		ug/Kg		104	70 - 133
Methyl acetate	40.0	39.6		ug/Kg		99	27 - 142
Methylcyclohexane	40.0	42.1		ug/Kg		105	66 - 135
Methyl tert-butyl ether	40.0	42.0		ug/Kg		105	48 - 132
Trichlorofluoromethane	40.0	30.4		ug/Kg		76	20 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	36.7		ug/Kg		92	55 - 130
1,2-Dichlorobenzene	40.0	39.5		ug/Kg		99	71 - 124
1,3-Dichlorobenzene	40.0	39.1		ug/Kg		98	75 - 118
1,4-Dichlorobenzene	40.0	38.5		ug/Kg		96	77 - 116
1,2,4-Trichlorobenzene	40.0	41.2		ug/Kg		103	51 - 136
Toluene	40.0	39.1		ug/Kg		98	78 - 124
N-Propylbenzene	40.0	39.1		ug/Kg		98	80 - 120
1,2,3-Trichloropropane	40.0	42.2		ug/Kg		106	54 - 135
1,3,5-Trimethylbenzene	40.0	40.5		ug/Kg		101	68 - 133
tert-Butylbenzene	40.0	39.0		ug/Kg		97	74 - 133
1,2,4-Trimethylbenzene	40.0	40.4		ug/Kg		101	80 - 121
sec-Butylbenzene	40.0	40.5		ug/Kg		101	70 - 130
n-Butylbenzene	40.0	42.0		ug/Kg		105	59 - 145
Hexachlorobutadiene	40.0	43.7		ug/Kg		109	42 - 150
Naphthalene	40.0	37.1		ug/Kg		93	31 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		52 - 124
Toluene-d8 (Surr)	96		72 - 127
4-Bromofluorobenzene (Surr)	99		63 - 120
Dibromofluoromethane (Surr)	104		68 - 121

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-20106/1-A

Matrix: Solid

Analysis Batch: 20110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	5.0	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Benzene	ND		5.0	0.68	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Bromodichloromethane	ND		5.0	0.56	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Bromoform	ND		5.0	0.44	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Bromomethane	ND		5.0	0.74	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
2-Butanone (MEK)	ND		5.0	0.88	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Carbon disulfide	ND		5.0	0.51	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Carbon tetrachloride	ND		5.0	0.45	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Chlorobenzene	ND		5.0	0.76	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Chloroform	ND		5.0	0.58	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Chloromethane	ND		5.0	0.85	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Dibromochloromethane	ND		5.0	0.71	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,1-Dichloroethane	ND		5.0	0.58	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,2-Dichloroethane	ND		5.0	0.61	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,1-Dichloroethene	ND		5.0	0.85	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Acetonitrile	ND		100	23	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,2-Dichloropropane	ND		5.0	0.54	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
cis-1,3-Dichloropropene	ND		5.0	0.68	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Ethylbenzene	ND		5.0	0.64	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
2-Hexanone	ND		5.0	0.69	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Methylene Chloride	1.28	J	5.0	0.67	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.65	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Styrene	ND		5.0	0.71	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.72	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Tetrachloroethene	ND		5.0	0.68	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,1,1-Trichloroethane	ND		5.0	0.49	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,1,2-Trichloroethane	ND		5.0	0.83	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Trichloroethene	ND		5.0	0.66	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Vinyl chloride	ND		5.0	0.47	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Xylenes, Total	ND		15	2.2	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Cyclohexane	ND		5.0	0.37	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.75	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,2-Dibromoethane (EDB)	ND		5.0	0.86	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Dichlorodifluoromethane	ND		5.0	0.67	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
cis-1,2-Dichloroethene	ND		5.0	0.70	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
trans-1,2-Dichloroethene	ND		5.0	0.60	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Methyl acetate	ND		5.0	0.90	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Methylcyclohexane	ND		5.0	0.73	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Methyl tert-butyl ether	ND		5.0	0.75	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Trichlorofluoromethane	ND		5.0	0.92	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,2-Dichlorobenzene	ND		5.0	0.80	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,3-Dichlorobenzene	ND		5.0	0.66	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,4-Dichlorobenzene	ND		5.0	0.64	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,2,4-Trichlorobenzene	ND		5.0	0.88	ug/Kg		11/09/11 05:26	11/09/11 07:48	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-20106/1-A

Matrix: Solid

Analysis Batch: 20110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	2.19	J	5.0	0.73	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
N-Propylbenzene	ND		5.0	0.76	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,2,3-Trichloropropane	ND		5.0	0.93	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,3,5-Trimethylbenzene	ND		5.0	0.67	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
tert-Butylbenzene	ND		5.0	0.71	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
1,2,4-Trimethylbenzene	ND		5.0	0.65	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
sec-Butylbenzene	ND		5.0	0.78	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
n-Butylbenzene	ND		5.0	0.80	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Hexachlorobutadiene	ND		5.0	1.1	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Naphthalene	1.22	J	5.0	1.0	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Acrolein	ND		100	7.0	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Acrylonitrile	ND		100	10	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Methacrylonitrile	ND		5.0	0.30	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Isobutyl alcohol	ND		200	26	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Methyl methacrylate	ND		5.0	0.69	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Ethyl methacrylate	ND		5.0	0.42	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Vinyl acetate	ND		5.0	0.35	ug/Kg		11/09/11 05:26	11/09/11 07:48	1
Hexane	ND		5.0	1.0	ug/Kg		11/09/11 05:26	11/09/11 07:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		52 - 124	11/09/11 05:26	11/09/11 07:48	1
Toluene-d8 (Surr)	99		72 - 127	11/09/11 05:26	11/09/11 07:48	1
4-Bromofluorobenzene (Surr)	99		63 - 120	11/09/11 05:26	11/09/11 07:48	1
Dibromofluoromethane (Surr)	101		68 - 121	11/09/11 05:26	11/09/11 07:48	1

Lab Sample ID: LCS 180-20106/2-A

Matrix: Solid

Analysis Batch: 20110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	45.8		ug/Kg		114	20 - 150
Benzene	40.0	40.5		ug/Kg		101	77 - 120
Bromodichloromethane	40.0	41.4		ug/Kg		104	70 - 125
Bromoform	40.0	39.4		ug/Kg		98	53 - 140
Bromomethane	40.0	37.5		ug/Kg		94	25 - 150
2-Butanone (MEK)	40.0	41.4		ug/Kg		104	35 - 149
Carbon disulfide	40.0	35.1		ug/Kg		88	50 - 127
Carbon tetrachloride	40.0	45.2		ug/Kg		113	69 - 122
Chlorobenzene	40.0	39.4		ug/Kg		99	79 - 120
Chloroethane	40.0	41.9		ug/Kg		105	22 - 150
Chloroform	40.0	41.1		ug/Kg		103	72 - 120
Chloromethane	40.0	36.7		ug/Kg		92	44 - 131
Dibromochloromethane	40.0	43.4		ug/Kg		109	70 - 132
1,1-Dichloroethane	40.0	40.5		ug/Kg		101	66 - 124
1,2-Dichloroethane	40.0	41.6		ug/Kg		104	61 - 127
1,1-Dichloroethene	40.0	41.4		ug/Kg		104	59 - 129
1,2-Dichloropropane	40.0	39.8		ug/Kg		99	72 - 122
cis-1,3-Dichloropropene	40.0	40.4		ug/Kg		101	73 - 120
trans-1,3-Dichloropropene	40.0	41.3		ug/Kg		103	74 - 129

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-20106/2-A

Matrix: Solid

Analysis Batch: 20110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	40.0	40.5		ug/Kg		101	78 - 125
2-Hexanone	40.0	44.0		ug/Kg		110	32 - 150
Methylene Chloride	40.0	40.1		ug/Kg		100	58 - 127
4-Methyl-2-pentanone (MIBK)	40.0	41.7		ug/Kg		104	44 - 148
Bromochloromethane	40.0	41.6		ug/Kg		104	67 - 126
Styrene	40.0	41.3		ug/Kg		103	83 - 129
1,1,2,2-Tetrachloroethane	40.0	42.7		ug/Kg		107	60 - 139
Tetrachloroethene	40.0	40.4		ug/Kg		101	78 - 129
1,1,1-Trichloroethane	40.0	46.0		ug/Kg		115	67 - 126
1,1,2-Trichloroethane	40.0	38.3		ug/Kg		96	70 - 128
Trichloroethene	40.0	41.5		ug/Kg		104	76 - 119
Vinyl chloride	40.0	41.3		ug/Kg		103	63 - 124
Cyclohexane	40.0	41.4		ug/Kg		104	64 - 130
1,2-Dibromo-3-Chloropropane	40.0	38.2		ug/Kg		95	35 - 136
1,2-Dibromoethane (EDB)	40.0	39.8		ug/Kg		99	70 - 131
Dichlorodifluoromethane	40.0	34.5		ug/Kg		86	25 - 150
cis-1,2-Dichloroethene	40.0	42.0		ug/Kg		105	80 - 118
trans-1,2-Dichloroethene	40.0	42.7		ug/Kg		107	77 - 121
Isopropylbenzene	40.0	41.9		ug/Kg		105	70 - 133
Methyl acetate	40.0	39.5		ug/Kg		99	27 - 142
Methylcyclohexane	40.0	40.6		ug/Kg		101	66 - 135
Methyl tert-butyl ether	40.0	41.3		ug/Kg		103	48 - 132
Trichlorofluoromethane	40.0	38.9		ug/Kg		97	20 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	28.5		ug/Kg		71	55 - 130
1,2-Dichlorobenzene	40.0	40.0		ug/Kg		100	71 - 124
1,3-Dichlorobenzene	40.0	39.9		ug/Kg		100	75 - 118
1,4-Dichlorobenzene	40.0	39.2		ug/Kg		98	77 - 116
1,2,4-Trichlorobenzene	40.0	39.9		ug/Kg		100	51 - 136
Toluene	40.0	41.2		ug/Kg		103	78 - 124
N-Propylbenzene	40.0	40.5		ug/Kg		101	80 - 120
1,2,3-Trichloropropane	40.0	40.8		ug/Kg		102	54 - 135
1,3,5-Trimethylbenzene	40.0	40.5		ug/Kg		101	68 - 133
tert-Butylbenzene	40.0	40.3		ug/Kg		101	74 - 133
1,2,4-Trimethylbenzene	40.0	40.2		ug/Kg		100	80 - 121
sec-Butylbenzene	40.0	41.9		ug/Kg		105	70 - 130
n-Butylbenzene	40.0	42.0		ug/Kg		105	59 - 145
Hexachlorobutadiene	40.0	43.1		ug/Kg		108	42 - 150
Naphthalene	40.0	38.5		ug/Kg		96	31 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		52 - 124
Toluene-d8 (Surr)	93		72 - 127
4-Bromofluorobenzene (Surr)	97		63 - 120
Dibromofluoromethane (Surr)	99		68 - 121

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-21046/1-A

Matrix: Solid

Analysis Batch: 21048

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	5.0	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Benzene	ND		5.0	0.68	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Bromodichloromethane	ND		5.0	0.56	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Bromoform	ND		5.0	0.44	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Bromomethane	ND		5.0	0.74	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
2-Butanone (MEK)	ND		5.0	0.88	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Carbon disulfide	ND		5.0	0.51	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Carbon tetrachloride	ND		5.0	0.45	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Chlorobenzene	ND		5.0	0.76	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Chloroform	ND		5.0	0.58	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Chloromethane	ND		5.0	0.85	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Dibromochloromethane	ND		5.0	0.71	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,1-Dichloroethane	ND		5.0	0.58	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,2-Dichloroethane	ND		5.0	0.61	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,1-Dichloroethene	ND		5.0	0.85	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Acetonitrile	ND		100	23	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,2-Dichloropropane	ND		5.0	0.54	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
cis-1,3-Dichloropropene	ND		5.0	0.68	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Ethylbenzene	ND		5.0	0.64	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
2-Hexanone	ND		5.0	0.69	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Methylene Chloride	2.59	J	5.0	0.67	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.65	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Styrene	ND		5.0	0.71	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.72	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Tetrachloroethene	ND		5.0	0.68	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,1,1-Trichloroethane	ND		5.0	0.49	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,1,2-Trichloroethane	ND		5.0	0.83	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Trichloroethene	ND		5.0	0.66	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Vinyl chloride	ND		5.0	0.47	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Xylenes, Total	ND		15	2.2	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Cyclohexane	ND		5.0	0.37	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.75	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,2-Dibromoethane (EDB)	ND		5.0	0.86	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Dichlorodifluoromethane	ND		5.0	0.67	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
cis-1,2-Dichloroethene	ND		5.0	0.70	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
trans-1,2-Dichloroethene	ND		5.0	0.60	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Methyl acetate	ND		5.0	0.90	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Methylcyclohexane	ND		5.0	0.73	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Methyl tert-butyl ether	ND		5.0	0.75	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Trichlorofluoromethane	ND		5.0	0.92	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,2-Dichlorobenzene	ND		5.0	0.80	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,3-Dichlorobenzene	ND		5.0	0.66	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,4-Dichlorobenzene	ND		5.0	0.64	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,2,4-Trichlorobenzene	ND		5.0	0.88	ug/Kg		11/17/11 04:49	11/17/11 07:04	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-21046/1-A

Matrix: Solid

Analysis Batch: 21048

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	0.73	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
N-Propylbenzene	ND		5.0	0.76	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,2,3-Trichloropropane	ND		5.0	0.93	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,3,5-Trimethylbenzene	ND		5.0	0.67	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
tert-Butylbenzene	ND		5.0	0.71	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
1,2,4-Trimethylbenzene	ND		5.0	0.65	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
sec-Butylbenzene	ND		5.0	0.78	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
n-Butylbenzene	ND		5.0	0.80	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Hexachlorobutadiene	ND		5.0	1.1	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Naphthalene	2.31	J	5.0	1.0	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Acrolein	ND		100	7.0	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Acrylonitrile	ND		100	10	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Methacrylonitrile	ND		5.0	0.30	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Isobutyl alcohol	ND		200	26	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Methyl methacrylate	ND		5.0	0.69	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Ethyl methacrylate	ND		5.0	0.42	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Vinyl acetate	ND		5.0	0.35	ug/Kg		11/17/11 04:49	11/17/11 07:04	1
Hexane	ND		5.0	1.0	ug/Kg		11/17/11 04:49	11/17/11 07:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		52 - 124	11/17/11 04:49	11/17/11 07:04	1
Toluene-d8 (Surr)	100		72 - 127	11/17/11 04:49	11/17/11 07:04	1
4-Bromofluorobenzene (Surr)	95		63 - 120	11/17/11 04:49	11/17/11 07:04	1
Dibromofluoromethane (Surr)	98		68 - 121	11/17/11 04:49	11/17/11 07:04	1

Lab Sample ID: LCS 180-21046/2-A

Matrix: Solid

Analysis Batch: 21048

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21046

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	31.3		ug/Kg		78	20 - 150
Benzene	40.0	40.0		ug/Kg		100	77 - 120
Bromodichloromethane	40.0	40.7		ug/Kg		102	70 - 125
Bromoform	40.0	37.0		ug/Kg		92	53 - 140
Bromomethane	40.0	36.4		ug/Kg		91	25 - 150
2-Butanone (MEK)	40.0	34.6		ug/Kg		87	35 - 149
Carbon disulfide	40.0	36.4		ug/Kg		91	50 - 127
Carbon tetrachloride	40.0	44.8		ug/Kg		112	69 - 122
Chlorobenzene	40.0	41.3		ug/Kg		103	79 - 120
Chloroethane	40.0	36.3		ug/Kg		91	22 - 150
Chloroform	40.0	40.3		ug/Kg		101	72 - 120
Chloromethane	40.0	36.7		ug/Kg		92	44 - 131
Dibromochloromethane	40.0	43.4		ug/Kg		108	70 - 132
1,1-Dichloroethane	40.0	39.6		ug/Kg		99	66 - 124
1,2-Dichloroethane	40.0	39.6		ug/Kg		99	61 - 127
1,1-Dichloroethene	40.0	41.7		ug/Kg		104	59 - 129
1,2-Dichloropropane	40.0	38.9		ug/Kg		97	72 - 122
cis-1,3-Dichloropropene	40.0	39.9		ug/Kg		100	73 - 120
trans-1,3-Dichloropropene	40.0	41.6		ug/Kg		104	74 - 129

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-21046/2-A

Matrix: Solid

Analysis Batch: 21048

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21046

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	40.0	41.7		ug/Kg		104	78 - 125
2-Hexanone	40.0	38.9		ug/Kg		97	32 - 150
Methylene Chloride	40.0	41.2		ug/Kg		103	58 - 127
4-Methyl-2-pentanone (MIBK)	40.0	41.8		ug/Kg		104	44 - 148
Bromochloromethane	40.0	41.2		ug/Kg		103	67 - 126
Styrene	40.0	41.5		ug/Kg		104	83 - 129
1,1,2,2-Tetrachloroethane	40.0	40.6		ug/Kg		102	60 - 139
Tetrachloroethene	40.0	42.1		ug/Kg		105	78 - 129
1,1,1-Trichloroethane	40.0	44.0		ug/Kg		110	67 - 126
1,1,2-Trichloroethane	40.0	39.8		ug/Kg		99	70 - 128
Trichloroethene	40.0	39.9		ug/Kg		100	76 - 119
Vinyl chloride	40.0	37.3		ug/Kg		93	63 - 124
Cyclohexane	40.0	42.9		ug/Kg		107	64 - 130
1,2-Dibromo-3-Chloropropane	40.0	34.8		ug/Kg		87	35 - 136
1,2-Dibromoethane (EDB)	40.0	40.0		ug/Kg		100	70 - 131
Dichlorodifluoromethane	40.0	36.1		ug/Kg		90	25 - 150
cis-1,2-Dichloroethene	40.0	41.1		ug/Kg		103	80 - 118
trans-1,2-Dichloroethene	40.0	42.6		ug/Kg		106	77 - 121
Isopropylbenzene	40.0	42.5		ug/Kg		106	70 - 133
Methyl acetate	40.0	37.2		ug/Kg		93	27 - 142
Methylcyclohexane	40.0	40.5		ug/Kg		101	66 - 135
Methyl tert-butyl ether	40.0	40.5		ug/Kg		101	48 - 132
Trichlorofluoromethane	40.0	43.6		ug/Kg		109	20 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	45.6		ug/Kg		114	55 - 130
1,2-Dichlorobenzene	40.0	40.5		ug/Kg		101	71 - 124
1,3-Dichlorobenzene	40.0	40.6		ug/Kg		101	75 - 118
1,4-Dichlorobenzene	40.0	39.7		ug/Kg		99	77 - 116
1,2,4-Trichlorobenzene	40.0	35.2		ug/Kg		88	51 - 136
Toluene	40.0	41.4		ug/Kg		104	78 - 124
N-Propylbenzene	40.0	42.8		ug/Kg		107	80 - 120
1,2,3-Trichloropropane	40.0	42.4		ug/Kg		106	54 - 135
1,3,5-Trimethylbenzene	40.0	44.1		ug/Kg		110	68 - 133
tert-Butylbenzene	40.0	42.5		ug/Kg		106	74 - 133
1,2,4-Trimethylbenzene	40.0	42.4		ug/Kg		106	80 - 121
sec-Butylbenzene	40.0	43.6		ug/Kg		109	70 - 130
n-Butylbenzene	40.0	42.9		ug/Kg		107	59 - 145
Hexachlorobutadiene	40.0	39.7		ug/Kg		99	42 - 150
Naphthalene	40.0	31.6		ug/Kg		79	31 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		52 - 124
Toluene-d8 (Surr)	99		72 - 127
4-Bromofluorobenzene (Surr)	94		63 - 120
Dibromofluoromethane (Surr)	95		68 - 121

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-21486/4

Matrix: Water

Analysis Batch: 21486

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			11/21/11 11:14	1
Benzene	ND		1.0	0.11	ug/L			11/21/11 11:14	1
Bromodichloromethane	ND		1.0	0.13	ug/L			11/21/11 11:14	1
Bromoform	ND		1.0	0.19	ug/L			11/21/11 11:14	1
Bromomethane	ND		1.0	0.31	ug/L			11/21/11 11:14	1
2-Butanone (MEK)	ND		5.0	0.55	ug/L			11/21/11 11:14	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/21/11 11:14	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/21/11 11:14	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/21/11 11:14	1
Chloroethane	ND		1.0	0.21	ug/L			11/21/11 11:14	1
Chloroform	ND		1.0	0.17	ug/L			11/21/11 11:14	1
Dibromochloromethane	ND		1.0	0.14	ug/L			11/21/11 11:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.14	ug/L			11/21/11 11:14	1
1,2-Dibromoethane (EDB)	ND		1.0	0.18	ug/L			11/21/11 11:14	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			11/21/11 11:14	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/21/11 11:14	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			11/21/11 11:14	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/21/11 11:14	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			11/21/11 11:14	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			11/21/11 11:14	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			11/21/11 11:14	1
Ethylbenzene	ND		1.0	0.23	ug/L			11/21/11 11:14	1
2-Hexanone	ND		5.0	0.16	ug/L			11/21/11 11:14	1
Methylene Chloride	ND		1.0	0.15	ug/L			11/21/11 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53	ug/L			11/21/11 11:14	1
Styrene	ND		1.0	0.097	ug/L			11/21/11 11:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			11/21/11 11:14	1
Tetrachloroethene	ND		1.0	0.15	ug/L			11/21/11 11:14	1
Toluene	ND		1.0	0.15	ug/L			11/21/11 11:14	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			11/21/11 11:14	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			11/21/11 11:14	1
Trichloroethene	ND		1.0	0.14	ug/L			11/21/11 11:14	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/21/11 11:14	1
Vinyl chloride	ND		1.0	0.23	ug/L			11/21/11 11:14	1
Xylenes, Total	ND		3.0	0.49	ug/L			11/21/11 11:14	1
Cyclohexane	ND		1.0	0.25	ug/L			11/21/11 11:14	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			11/21/11 11:14	1
Dichlorodifluoromethane	ND		1.0	0.19	ug/L			11/21/11 11:14	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/21/11 11:14	1
Methyl acetate	ND		1.0	0.14	ug/L			11/21/11 11:14	1
Methylcyclohexane	ND		1.0	0.26	ug/L			11/21/11 11:14	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			11/21/11 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.32	ug/L			11/21/11 11:14	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			11/21/11 11:14	1
1,3-Dichlorobenzene	ND		1.0	0.11	ug/L			11/21/11 11:14	1
1,4-Dichlorobenzene	ND		1.0	0.21	ug/L			11/21/11 11:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			11/21/11 11:14	1
Chloromethane	ND		1.0	0.28	ug/L			11/21/11 11:14	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-21486/4

Matrix: Water

Analysis Batch: 21486

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 135		11/21/11 11:14	1
Toluene-d8 (Surr)	91		71 - 118		11/21/11 11:14	1
4-Bromofluorobenzene (Surr)	92		70 - 118		11/21/11 11:14	1
Dibromofluoromethane (Surr)	97		70 - 128		11/21/11 11:14	1

Lab Sample ID: LCS 180-21486/5

Matrix: Water

Analysis Batch: 21486

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	9.89		ug/L		99	22 - 150
Benzene	10.0	8.67		ug/L		87	80 - 120
Bromodichloromethane	10.0	8.71		ug/L		87	66 - 130
Bromoform	10.0	9.03		ug/L		90	46 - 150
Bromomethane	10.0	8.01		ug/L		80	33 - 150
2-Butanone (MEK)	10.0	10.4		ug/L		104	39 - 138
Carbon disulfide	10.0	7.77		ug/L		78	54 - 132
Carbon tetrachloride	10.0	8.47		ug/L		85	55 - 150
Chlorobenzene	10.0	8.58		ug/L		86	80 - 120
Chloroethane	10.0	7.85		ug/L		79	36 - 142
Chloroform	10.0	8.65		ug/L		87	72 - 127
Dibromochloromethane	10.0	8.92		ug/L		89	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.65		ug/L		87	37 - 133
1,2-Dibromoethane (EDB)	10.0	8.42		ug/L		84	74 - 123
1,1-Dichloroethane	10.0	8.33		ug/L		83	73 - 126
1,2-Dichloroethane	10.0	8.39		ug/L		84	68 - 132
1,1-Dichloroethene	10.0	8.12		ug/L		81	65 - 136
trans-1,2-Dichloroethene	10.0	8.62		ug/L		86	73 - 126
1,2-Dichloropropane	10.0	8.85		ug/L		88	76 - 124
cis-1,3-Dichloropropene	10.0	8.67		ug/L		87	66 - 120
trans-1,3-Dichloropropene	10.0	8.65		ug/L		86	65 - 125
Ethylbenzene	10.0	8.54		ug/L		85	72 - 126
2-Hexanone	10.0	8.78		ug/L		88	25 - 132
Methylene Chloride	10.0	7.49		ug/L		75	63 - 129
4-Methyl-2-pentanone (MIBK)	10.0	8.42		ug/L		84	45 - 145
Styrene	10.0	8.73		ug/L		87	71 - 127
1,1,2,2-Tetrachloroethane	10.0	8.80		ug/L		88	62 - 125
Tetrachloroethene	10.0	8.57		ug/L		86	70 - 135
Toluene	10.0	8.74		ug/L		87	80 - 123
1,1,1-Trichloroethane	10.0	8.40		ug/L		84	63 - 133
1,1,2-Trichloroethane	10.0	8.75		ug/L		88	77 - 127
Trichloroethene	10.0	8.68		ug/L		87	73 - 120
Trichlorofluoromethane	10.0	7.63		ug/L		76	44 - 150
Vinyl chloride	10.0	8.07		ug/L		81	53 - 138
Xylenes, Total	30.0	26.4		ug/L		88	76 - 128
Cyclohexane	10.0	7.91		ug/L		79	45 - 142
cis-1,2-Dichloroethene	10.0	8.39		ug/L		84	70 - 120
Dichlorodifluoromethane	10.0	4.82		ug/L		48	13 - 150
Isopropylbenzene	10.0	8.62		ug/L		86	58 - 130

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-21486/5

Matrix: Water

Analysis Batch: 21486

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	10.0	8.51		ug/L		85	47 - 142
Methylcyclohexane	10.0	8.18		ug/L		82	45 - 145
Methyl tert-butyl ether	10.0	8.42		ug/L		84	64 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.19		ug/L		82	46 - 148
1,2-Dichlorobenzene	10.0	8.18		ug/L		82	77 - 120
1,3-Dichlorobenzene	10.0	8.12		ug/L		81	76 - 120
1,4-Dichlorobenzene	10.0	8.24		ug/L		82	77 - 120
1,2,4-Trichlorobenzene	10.0	8.06		ug/L		81	60 - 127
Chloromethane	10.0	7.02		ug/L		70	50 - 139

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		64 - 135
Toluene-d8 (Surr)	88		71 - 118
4-Bromofluorobenzene (Surr)	90		70 - 118
Dibromofluoromethane (Surr)	89		70 - 128

Lab Sample ID: LCSD 180-21486/6

Matrix: Water

Analysis Batch: 21486

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10.0	10.7		ug/L		107	22 - 150	8	35
Benzene	10.0	9.74		ug/L		97	80 - 120	12	32
Bromodichloromethane	10.0	9.92		ug/L		99	66 - 130	13	35
Bromoform	10.0	9.42		ug/L		94	46 - 150	4	35
Bromomethane	10.0	8.97		ug/L		90	33 - 150	11	35
2-Butanone (MEK)	10.0	10.9		ug/L		109	39 - 138	5	35
Carbon disulfide	10.0	8.45		ug/L		84	54 - 132	8	35
Carbon tetrachloride	10.0	9.45		ug/L		94	55 - 150	11	35
Chlorobenzene	10.0	9.42		ug/L		94	80 - 120	9	29
Chloroethane	10.0	8.99		ug/L		90	36 - 142	14	35
Chloroform	10.0	9.52		ug/L		95	72 - 127	10	35
Dibromochloromethane	10.0	9.43		ug/L		94	60 - 140	5	35
1,2-Dibromo-3-Chloropropane	10.0	8.39		ug/L		84	37 - 133	3	35
1,2-Dibromoethane (EDB)	10.0	9.19		ug/L		92	74 - 123	9	35
1,1-Dichloroethane	10.0	9.32		ug/L		93	73 - 126	11	35
1,2-Dichloroethane	10.0	9.50		ug/L		95	68 - 132	12	32
1,1-Dichloroethene	10.0	9.00		ug/L		90	65 - 136	10	35
trans-1,2-Dichloroethene	10.0	9.33		ug/L		93	73 - 126	8	35
1,2-Dichloropropane	10.0	9.69		ug/L		97	76 - 124	9	34
cis-1,3-Dichloropropene	10.0	9.91		ug/L		99	66 - 120	13	35
trans-1,3-Dichloropropene	10.0	9.42		ug/L		94	65 - 125	9	35
Ethylbenzene	10.0	9.49		ug/L		95	72 - 126	11	33
2-Hexanone	10.0	9.32		ug/L		93	25 - 132	6	35
Methylene Chloride	10.0	8.49		ug/L		85	63 - 129	13	35
4-Methyl-2-pentanone (MIBK)	10.0	9.10		ug/L		91	45 - 145	8	35
Styrene	10.0	9.72		ug/L		97	71 - 127	11	34
1,1,2,2-Tetrachloroethane	10.0	8.94		ug/L		89	62 - 125	2	35
Tetrachloroethene	10.0	9.44		ug/L		94	70 - 135	10	35

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-21486/6

Matrix: Water

Analysis Batch: 21486

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	10.0	9.56		ug/L		96	80 - 123	9	35
1,1,1-Trichloroethane	10.0	9.49		ug/L		95	63 - 133	12	35
1,1,2-Trichloroethane	10.0	9.74		ug/L		97	77 - 127	11	35
Trichloroethene	10.0	9.36		ug/L		94	73 - 120	8	35
Trichlorofluoromethane	10.0	8.41		ug/L		84	44 - 150	10	35
Vinyl chloride	10.0	8.61		ug/L		86	53 - 138	6	35
Xylenes, Total	30.0	29.0		ug/L		97	76 - 128	9	32
Cyclohexane	10.0	9.01		ug/L		90	45 - 142	13	35
cis-1,2-Dichloroethene	10.0	9.52		ug/L		95	70 - 120	13	35
Dichlorodifluoromethane	10.0	5.32		ug/L		53	13 - 150	10	35
Isopropylbenzene	10.0	9.57		ug/L		96	58 - 130	10	35
Methyl acetate	10.0	9.08		ug/L		91	47 - 142	6	35
Methylcyclohexane	10.0	9.19		ug/L		92	45 - 145	12	35
Methyl tert-butyl ether	10.0	9.28		ug/L		93	64 - 123	10	35
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.83		ug/L		88	46 - 148	8	35
1,2-Dichlorobenzene	10.0	8.80		ug/L		88	77 - 120	7	24
1,3-Dichlorobenzene	10.0	8.64		ug/L		86	76 - 120	6	24
1,4-Dichlorobenzene	10.0	8.76		ug/L		88	77 - 120	6	24
1,2,4-Trichlorobenzene	10.0	8.83		ug/L		88	60 - 127	9	35
Chloromethane	10.0	7.90		ug/L		79	50 - 139	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	93		64 - 135
Toluene-d8 (Surr)	91		71 - 118
4-Bromofluorobenzene (Surr)	93		70 - 118
Dibromofluoromethane (Surr)	95		70 - 128

Lab Sample ID: MB 180-21590/4

Matrix: Water

Analysis Batch: 21590

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			11/22/11 08:10	1
Benzene	ND		1.0	0.11	ug/L			11/22/11 08:10	1
Bromodichloromethane	ND		1.0	0.13	ug/L			11/22/11 08:10	1
Bromoform	ND		1.0	0.19	ug/L			11/22/11 08:10	1
Bromomethane	ND		1.0	0.31	ug/L			11/22/11 08:10	1
2-Butanone (MEK)	ND		5.0	0.55	ug/L			11/22/11 08:10	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/22/11 08:10	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/22/11 08:10	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/22/11 08:10	1
Chloroethane	ND		1.0	0.21	ug/L			11/22/11 08:10	1
Chloroform	ND		1.0	0.17	ug/L			11/22/11 08:10	1
Dibromochloromethane	ND		1.0	0.14	ug/L			11/22/11 08:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.14	ug/L			11/22/11 08:10	1
1,2-Dibromoethane (EDB)	ND		1.0	0.18	ug/L			11/22/11 08:10	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			11/22/11 08:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/22/11 08:10	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			11/22/11 08:10	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-21590/4

Matrix: Water

Analysis Batch: 21590

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/22/11 08:10	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			11/22/11 08:10	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			11/22/11 08:10	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			11/22/11 08:10	1
Ethylbenzene	ND		1.0	0.23	ug/L			11/22/11 08:10	1
2-Hexanone	ND		5.0	0.16	ug/L			11/22/11 08:10	1
Methylene Chloride	ND		1.0	0.15	ug/L			11/22/11 08:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53	ug/L			11/22/11 08:10	1
Styrene	ND		1.0	0.097	ug/L			11/22/11 08:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			11/22/11 08:10	1
Tetrachloroethene	ND		1.0	0.15	ug/L			11/22/11 08:10	1
Toluene	ND		1.0	0.15	ug/L			11/22/11 08:10	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			11/22/11 08:10	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			11/22/11 08:10	1
Trichloroethene	ND		1.0	0.14	ug/L			11/22/11 08:10	1
Trichlorofluoromethane	ND		1.0	0.20	ug/L			11/22/11 08:10	1
Vinyl chloride	ND		1.0	0.23	ug/L			11/22/11 08:10	1
Xylenes, Total	ND		3.0	0.49	ug/L			11/22/11 08:10	1
Cyclohexane	ND		1.0	0.25	ug/L			11/22/11 08:10	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			11/22/11 08:10	1
Dichlorodifluoromethane	ND		1.0	0.19	ug/L			11/22/11 08:10	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/22/11 08:10	1
Methyl acetate	ND		1.0	0.14	ug/L			11/22/11 08:10	1
Methylcyclohexane	ND		1.0	0.26	ug/L			11/22/11 08:10	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			11/22/11 08:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.32	ug/L			11/22/11 08:10	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/11 08:10	1
1,3-Dichlorobenzene	ND		1.0	0.11	ug/L			11/22/11 08:10	1
1,4-Dichlorobenzene	ND		1.0	0.21	ug/L			11/22/11 08:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			11/22/11 08:10	1
Chloromethane	ND		1.0	0.28	ug/L			11/22/11 08:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 135		11/22/11 08:10	1
Toluene-d8 (Surr)	89		71 - 118		11/22/11 08:10	1
4-Bromofluorobenzene (Surr)	89		70 - 118		11/22/11 08:10	1
Dibromofluoromethane (Surr)	97		70 - 128		11/22/11 08:10	1

Lab Sample ID: LCS 180-21590/5

Matrix: Water

Analysis Batch: 21590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	12.2		ug/L		122	22 - 150
Benzene	10.0	9.45		ug/L		95	80 - 120
Bromodichloromethane	10.0	9.80		ug/L		98	66 - 130
Bromoform	10.0	10.1		ug/L		101	46 - 150
Bromomethane	10.0	9.78		ug/L		98	33 - 150
2-Butanone (MEK)	10.0	10.4		ug/L		104	39 - 138

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-21590/5

Matrix: Water

Analysis Batch: 21590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	10.0	8.34		ug/L		83	54 - 132
Carbon tetrachloride	10.0	9.12		ug/L		91	55 - 150
Chlorobenzene	10.0	9.79		ug/L		98	80 - 120
Chloroethane	10.0	10.0		ug/L		100	36 - 142
Chloroform	10.0	9.81		ug/L		98	72 - 127
Dibromochloromethane	10.0	10.3		ug/L		103	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.76		ug/L		88	37 - 133
1,2-Dibromoethane (EDB)	10.0	9.81		ug/L		98	74 - 123
1,1-Dichloroethane	10.0	9.26		ug/L		93	73 - 126
1,2-Dichloroethane	10.0	9.85		ug/L		98	68 - 132
1,1-Dichloroethene	10.0	8.97		ug/L		90	65 - 136
trans-1,2-Dichloroethene	10.0	9.22		ug/L		92	73 - 126
1,2-Dichloropropane	10.0	9.69		ug/L		97	76 - 124
cis-1,3-Dichloropropene	10.0	9.53		ug/L		95	66 - 120
trans-1,3-Dichloropropene	10.0	9.61		ug/L		96	65 - 125
Ethylbenzene	10.0	9.48		ug/L		95	72 - 126
2-Hexanone	10.0	9.33		ug/L		93	25 - 132
Methylene Chloride	10.0	8.51		ug/L		85	63 - 129
4-Methyl-2-pentanone (MIBK)	10.0	9.06		ug/L		91	45 - 145
Styrene	10.0	10.0		ug/L		100	71 - 127
1,1,2,2-Tetrachloroethane	10.0	9.53		ug/L		95	62 - 125
Tetrachloroethene	10.0	9.33		ug/L		93	70 - 135
Toluene	10.0	9.78		ug/L		98	80 - 123
1,1,1-Trichloroethane	10.0	9.32		ug/L		93	63 - 133
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	77 - 127
Trichloroethene	10.0	9.18		ug/L		92	73 - 120
Trichlorofluoromethane	10.0	8.30		ug/L		83	44 - 150
Vinyl chloride	10.0	8.78		ug/L		88	53 - 138
Xylenes, Total	30.0	29.6		ug/L		99	76 - 128
Cyclohexane	10.0	8.33		ug/L		83	45 - 142
cis-1,2-Dichloroethene	10.0	9.33		ug/L		93	70 - 120
Dichlorodifluoromethane	10.0	5.20		ug/L		52	13 - 150
Isopropylbenzene	10.0	9.65		ug/L		96	58 - 130
Methyl acetate	10.0	9.70		ug/L		97	47 - 142
Methylcyclohexane	10.0	8.77		ug/L		88	45 - 145
Methyl tert-butyl ether	10.0	9.35		ug/L		94	64 - 123
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.11		ug/L		91	46 - 148
1,2-Dichlorobenzene	10.0	9.58		ug/L		96	77 - 120
1,3-Dichlorobenzene	10.0	9.03		ug/L		90	76 - 120
1,4-Dichlorobenzene	10.0	9.39		ug/L		94	77 - 120
1,2,4-Trichlorobenzene	10.0	9.21		ug/L		92	60 - 127
Chloromethane	10.0	7.98		ug/L		80	50 - 139

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		64 - 135
Toluene-d8 (Surr)	94		71 - 118
4-Bromofluorobenzene (Surr)	96		70 - 118
Dibromofluoromethane (Surr)	97		70 - 128

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-21590/6

Matrix: Water

Analysis Batch: 21590

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10.0	11.5		ug/L		115	22 - 150	6	35
Benzene	10.0	9.40		ug/L		94	80 - 120	1	32
Bromodichloromethane	10.0	9.18		ug/L		92	66 - 130	7	35
Bromoform	10.0	9.93		ug/L		99	46 - 150	2	35
Bromomethane	10.0	9.10		ug/L		91	33 - 150	7	35
2-Butanone (MEK)	10.0	10.7		ug/L		107	39 - 138	2	35
Carbon disulfide	10.0	7.97		ug/L		80	54 - 132	5	35
Carbon tetrachloride	10.0	9.22		ug/L		92	55 - 150	1	35
Chlorobenzene	10.0	9.58		ug/L		96	80 - 120	2	29
Chloroethane	10.0	9.32		ug/L		93	36 - 142	7	35
Chloroform	10.0	9.16		ug/L		92	72 - 127	7	35
Dibromochloromethane	10.0	9.69		ug/L		97	60 - 140	6	35
1,2-Dibromo-3-Chloropropane	10.0	9.15		ug/L		92	37 - 133	4	35
1,2-Dibromoethane (EDB)	10.0	9.31		ug/L		93	74 - 123	5	35
1,1-Dichloroethane	10.0	8.98		ug/L		90	73 - 126	3	35
1,2-Dichloroethane	10.0	9.23		ug/L		92	68 - 132	6	32
1,1-Dichloroethene	10.0	8.60		ug/L		86	65 - 136	4	35
trans-1,2-Dichloroethene	10.0	9.06		ug/L		91	73 - 126	2	35
1,2-Dichloropropane	10.0	9.37		ug/L		94	76 - 124	3	34
cis-1,3-Dichloropropene	10.0	9.42		ug/L		94	66 - 120	1	35
trans-1,3-Dichloropropene	10.0	9.59		ug/L		96	65 - 125	0	35
Ethylbenzene	10.0	9.76		ug/L		98	72 - 126	3	33
2-Hexanone	10.0	9.95		ug/L		100	25 - 132	6	35
Methylene Chloride	10.0	8.18		ug/L		82	63 - 129	4	35
4-Methyl-2-pentanone (MIBK)	10.0	8.99		ug/L		90	45 - 145	1	35
Styrene	10.0	9.65		ug/L		97	71 - 127	4	34
1,1,2,2-Tetrachloroethane	10.0	9.36		ug/L		94	62 - 125	2	35
Tetrachloroethene	10.0	9.32		ug/L		93	70 - 135	0	35
Toluene	10.0	9.70		ug/L		97	80 - 123	1	35
1,1,1-Trichloroethane	10.0	9.11		ug/L		91	63 - 133	2	35
1,1,2-Trichloroethane	10.0	9.91		ug/L		99	77 - 127	3	35
Trichloroethene	10.0	9.21		ug/L		92	73 - 120	0	35
Trichlorofluoromethane	10.0	8.07		ug/L		81	44 - 150	3	35
Vinyl chloride	10.0	8.05		ug/L		81	53 - 138	9	35
Xylenes, Total	30.0	28.9		ug/L		96	76 - 128	2	32
Cyclohexane	10.0	8.57		ug/L		86	45 - 142	3	35
cis-1,2-Dichloroethene	10.0	9.13		ug/L		91	70 - 120	2	35
Dichlorodifluoromethane	10.0	5.17		ug/L		52	13 - 150	1	35
Isopropylbenzene	10.0	9.54		ug/L		95	58 - 130	1	35
Methyl acetate	10.0	8.94		ug/L		89	47 - 142	8	35
Methylcyclohexane	10.0	8.76		ug/L		88	45 - 145	0	35
Methyl tert-butyl ether	10.0	8.86		ug/L		89	64 - 123	5	35
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.66		ug/L		87	46 - 148	5	35
1,2-Dichlorobenzene	10.0	9.29		ug/L		93	77 - 120	3	24
1,3-Dichlorobenzene	10.0	9.11		ug/L		91	76 - 120	1	24
1,4-Dichlorobenzene	10.0	9.31		ug/L		93	77 - 120	1	24
1,2,4-Trichlorobenzene	10.0	9.33		ug/L		93	60 - 127	1	35
Chloromethane	10.0	7.62		ug/L		76	50 - 139	5	35

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-21590/6

Matrix: Water

Analysis Batch: 21590

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		64 - 135
Toluene-d8 (Surr)	94		71 - 118
4-Bromofluorobenzene (Surr)	96		70 - 118
Dibromofluoromethane (Surr)	92		70 - 128

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-19851/1-A

Matrix: Solid

Analysis Batch: 20338

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.33	0.025	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Acenaphthene	ND		0.067	0.0064	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Acetophenone	ND		0.33	0.027	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Acenaphthylene	ND		0.067	0.0076	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Anthracene	ND		0.067	0.0065	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzo[a]anthracene	ND		0.067	0.0084	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzo[a]pyrene	ND		0.067	0.0067	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzo[b]fluoranthene	ND		0.067	0.010	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzo[g,h,i]perylene	ND		0.067	0.0066	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzo[k]fluoranthene	ND		0.067	0.013	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Bis(2-chloroethyl)ether	ND		0.067	0.0090	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Bis(2-chloroethoxy)methane	ND		0.33	0.022	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2,2'-oxybis[1-chloropropane]	ND		0.067	0.0072	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Bis(2-ethylhexyl) phthalate	ND		0.67	0.054	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
4-Bromophenyl phenyl ether	ND		0.33	0.029	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Butyl benzyl phthalate	ND		0.33	0.046	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Carbazole	ND		0.067	0.0061	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
4-Chloroaniline	ND		0.33	0.027	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2-Chloronaphthalene	ND		0.067	0.0070	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
4-Chlorophenyl phenyl ether	ND		0.33	0.037	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Chrysene	ND		0.067	0.0079	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Dibenz(a,h)anthracene	ND		0.067	0.0074	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Di-n-butyl phthalate	ND		0.33	0.042	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
3,3'-Dichlorobenzidine	ND		0.33	0.035	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Diethyl phthalate	ND		0.33	0.036	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Dimethyl phthalate	ND		0.33	0.036	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2,4-Dinitrotoluene	ND		0.33	0.027	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2,6-Dinitrotoluene	ND		0.33	0.034	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Di-n-octyl phthalate	ND		0.33	0.035	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Fluoranthene	ND		0.067	0.0071	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Fluorene	ND		0.067	0.0088	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Hexachlorobenzene	ND		0.067	0.0071	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
3,3'-Dimethylbenzidine	ND		1.7	0.018	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Hexachlorobutadiene	ND		0.067	0.0075	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Hexachlorocyclopentadiene	ND		0.33	0.036	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Hexachloroethane	ND		0.33	0.024	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Indeno[1,2,3-cd]pyrene	ND		0.067	0.0069	mg/Kg		11/07/11 04:22	11/08/11 18:14	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-19851/1-A

Matrix: Solid

Analysis Batch: 20338

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		0.33	0.025	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2-Methylnaphthalene	ND		0.067	0.0060	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Naphthalene	ND		0.067	0.0057	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2-Nitroaniline	ND		1.7	0.15	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
3-Nitroaniline	ND		1.7	0.14	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
4-Nitroaniline	ND		1.7	0.14	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Nitrobenzene	ND		0.67	0.028	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
N-Nitrosodi-n-propylamine	ND		0.067	0.0078	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
N-Nitrosodiphenylamine	ND		0.33	0.031	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Phenanthrene	ND		0.067	0.011	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Pyrene	ND		0.067	0.0067	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
4-Chloro-3-methylphenol	ND		0.33	0.031	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2-Chlorophenol	ND		0.33	0.027	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Aniline	ND		0.33	0.026	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2-Methylphenol	ND		0.33	0.023	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Methylphenol, 3 & 4	ND		0.33	0.033	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2,4-Dichlorophenol	ND		0.067	0.0067	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2,4-Dimethylphenol	ND		0.33	0.052	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2,4-Dinitrophenol	ND		1.7	0.40	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
4,6-Dinitro-2-methylphenol	ND		1.7	0.13	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2-Nitrophenol	ND		0.33	0.037	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzyl alcohol	ND		0.33	0.040	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
4-Nitrophenol	ND		1.7	0.12	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Pentachlorophenol	ND		0.33	0.030	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Phenol	ND		0.067	0.0079	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2,4,5-Trichlorophenol	ND		0.33	0.036	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
2,4,6-Trichlorophenol	ND		0.33	0.050	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
1,1'-Biphenyl	ND		0.33	0.030	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Caprolactam	ND		1.7	0.25	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzaldehyde	ND		0.33	0.050	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Atrazine	ND		0.33	0.032	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzoic acid	ND		1.7	0.14	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
Benzidine	ND		6.7	1.4	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
1,4-Dioxane	ND		0.67	0.038	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.33	0.043	mg/Kg		11/07/11 04:22	11/08/11 18:14	1
o-Toluidine	ND		0.33	0.025	mg/Kg		11/07/11 04:22	11/08/11 18:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	77		25 - 104	11/07/11 04:22	11/08/11 18:14	1
2-Fluorobiphenyl	72		35 - 105	11/07/11 04:22	11/08/11 18:14	1
Terphenyl-d14	70		25 - 127	11/07/11 04:22	11/08/11 18:14	1
Phenol-d5	85		25 - 105	11/07/11 04:22	11/08/11 18:14	1
2-Fluorophenol	78		39 - 103	11/07/11 04:22	11/08/11 18:14	1
2,4,6-Tribromophenol	84		35 - 124	11/07/11 04:22	11/08/11 18:14	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-19851/2-A

Matrix: Solid

Analysis Batch: 20338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	6.67	5.43		mg/Kg		81	30 - 125
Acenaphthene	6.67	5.97		mg/Kg		90	47 - 104
Acenaphthylene	6.67	6.22		mg/Kg		93	49 - 114
Anthracene	6.67	5.71		mg/Kg		86	45 - 112
Benzo[a]anthracene	6.67	6.62		mg/Kg		99	47 - 110
Benzo[a]pyrene	6.67	6.59		mg/Kg		99	47 - 112
Benzo[b]fluoranthene	6.67	6.39		mg/Kg		96	41 - 107
Benzo[g,h,i]perylene	6.67	5.90		mg/Kg		89	38 - 126
Benzo[k]fluoranthene	6.67	6.03		mg/Kg		90	44 - 115
Bis(2-chloroethyl)ether	6.67	5.59		mg/Kg		84	38 - 99
Bis(2-chloroethoxy)methane	6.67	5.88		mg/Kg		88	44 - 101
2,2'-oxybis[1-chloropropane]	6.67	5.65		mg/Kg		85	36 - 101
Bis(2-ethylhexyl) phthalate	6.67	6.29		mg/Kg		94	40 - 122
4-Bromophenyl phenyl ether	6.67	5.84		mg/Kg		88	47 - 110
Butyl benzyl phthalate	6.67	6.65		mg/Kg		100	41 - 118
Carbazole	6.67	5.56		mg/Kg		83	45 - 114
4-Chloroaniline	6.67	5.88		mg/Kg		88	25 - 108
2-Chloronaphthalene	6.67	5.57		mg/Kg		84	46 - 101
4-Chlorophenyl phenyl ether	6.67	5.83		mg/Kg		88	47 - 109
Chrysene	6.67	6.00		mg/Kg		90	46 - 111
Dibenz(a,h)anthracene	6.67	5.92		mg/Kg		89	39 - 127
Di-n-butyl phthalate	6.67	6.23		mg/Kg		93	43 - 121
3,3'-Dichlorobenzidine	6.67	6.48		mg/Kg		97	19 - 122
Diethyl phthalate	6.67	6.30		mg/Kg		95	47 - 115
Dimethyl phthalate	6.67	5.95		mg/Kg		89	49 - 111
2,4-Dinitrotoluene	6.67	6.38		mg/Kg		96	45 - 124
2,6-Dinitrotoluene	6.67	6.92		mg/Kg		104	50 - 122
Di-n-octyl phthalate	6.67	7.64		mg/Kg		115	33 - 129
Fluoranthene	6.67	5.98		mg/Kg		90	40 - 120
Fluorene	6.67	5.92		mg/Kg		89	46 - 109
Hexachlorobenzene	6.67	6.02		mg/Kg		90	47 - 108
Hexachlorobutadiene	6.67	5.82		mg/Kg		87	43 - 107
Hexachlorocyclopentadiene	6.67	5.95		mg/Kg		89	23 - 129
Hexachloroethane	6.67	5.81		mg/Kg		87	37 - 97
Indeno[1,2,3-cd]pyrene	6.67	5.79		mg/Kg		87	41 - 125
Isophorone	6.67	5.88		mg/Kg		88	47 - 110
2-Methylnaphthalene	6.67	6.03		mg/Kg		91	45 - 100
Naphthalene	6.67	5.85		mg/Kg		88	43 - 100
2-Nitroaniline	6.67	6.43		mg/Kg		96	45 - 117
3-Nitroaniline	6.67	6.59		mg/Kg		99	34 - 122
4-Nitroaniline	6.67	6.32		mg/Kg		95	38 - 123
Nitrobenzene	6.67	5.76		mg/Kg		86	43 - 104
N-Nitrosodi-n-propylamine	6.67	6.01		mg/Kg		90	42 - 107
N-Nitrosodiphenylamine	6.67	6.03		mg/Kg		90	44 - 111
Phenanthrene	6.67	5.91		mg/Kg		89	43 - 108
Pyrene	6.67	6.31		mg/Kg		95	41 - 115
4-Chloro-3-methylphenol	6.67	6.20		mg/Kg		93	47 - 109
2-Chlorophenol	6.67	5.85		mg/Kg		88	40 - 101
Aniline	6.67	5.58		mg/Kg		84	21 - 94

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-19851/2-A

Matrix: Solid

Analysis Batch: 20338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylphenol	6.67	5.85		mg/Kg		88	40 - 104
2,4-Dichlorophenol	6.67	6.16		mg/Kg		92	47 - 105
2,4-Dimethylphenol	6.67	6.13		mg/Kg		92	44 - 105
2,4-Dinitrophenol	6.67	7.54		mg/Kg		113	10 - 146
4,6-Dinitro-2-methylphenol	6.67	6.62		mg/Kg		99	24 - 134
2-Nitrophenol	6.67	6.23		mg/Kg		93	46 - 106
Benzyl alcohol	6.67	5.73		mg/Kg		86	39 - 108
4-Nitrophenol	6.67	6.37		mg/Kg		95	36 - 127
Pentachlorophenol	6.67	6.57		mg/Kg		99	17 - 122
Phenol	6.67	5.74		mg/Kg		86	41 - 102
2,4,5-Trichlorophenol	6.67	5.80		mg/Kg		87	48 - 108
2,4,6-Trichlorophenol	6.67	6.53		mg/Kg		98	50 - 106
Caprolactam	6.67	6.38		mg/Kg		96	30 - 150
Benzaldehyde	6.67	3.24		mg/Kg		49	30 - 150
Benzoic acid	6.67	7.06		mg/Kg		106	11 - 133
Benzidine	6.67	6.26	J	mg/Kg		94	30 - 120
1,4-Dioxane	6.67	5.17		mg/Kg		78	41 - 102
1,2-Diphenylhydrazine(as Azobenzene)	6.67	6.08		mg/Kg		91	43 - 113

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	85		25 - 104
2-Fluorobiphenyl	86		35 - 105
Terphenyl-d14	93		25 - 127
Phenol-d5	92		25 - 105
2-Fluorophenol	91		39 - 103
2,4,6-Tribromophenol	97		35 - 124

Lab Sample ID: LCSD 180-19851/3-A

Matrix: Solid

Analysis Batch: 20338

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19851

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,2,4,5-Tetrachlorobenzene	6.67	5.20		mg/Kg		78	30 - 125	4	25
Acenaphthene	6.67	5.67		mg/Kg		85	47 - 104	5	40
Acenaphthylene	6.67	5.82		mg/Kg		87	49 - 114	7	38
Anthracene	6.67	5.43		mg/Kg		81	45 - 112	5	42
Benzo[a]anthracene	6.67	6.50		mg/Kg		98	47 - 110	2	40
Benzo[a]pyrene	6.67	6.42		mg/Kg		96	47 - 112	3	42
Benzo[b]fluoranthene	6.67	6.59		mg/Kg		99	41 - 107	3	53
Benzo[g,h,i]perylene	6.67	5.75		mg/Kg		86	38 - 126	3	43
Benzo[k]fluoranthene	6.67	5.63		mg/Kg		85	44 - 115	7	44
Bis(2-chloroethyl)ether	6.67	5.55		mg/Kg		83	38 - 99	1	43
Bis(2-chloroethoxy)methane	6.67	5.76		mg/Kg		86	44 - 101	2	36
2,2'-oxybis[1-chloropropane]	6.67	5.51		mg/Kg		83	36 - 101	2	41
Bis(2-ethylhexyl) phthalate	6.67	6.37		mg/Kg		96	40 - 122	1	41
4-Bromophenyl phenyl ether	6.67	5.66		mg/Kg		85	47 - 110	3	46
Butyl benzyl phthalate	6.67	6.86		mg/Kg		103	41 - 118	3	41
Carbazole	6.67	5.38		mg/Kg		81	45 - 114	3	36
4-Chloroaniline	6.67	5.89		mg/Kg		88	25 - 108	0	36

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-19851/3-A

Matrix: Solid

Analysis Batch: 20338

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19851

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chloronaphthalene	6.67	5.27		mg/Kg		79	46 - 101	6	40
4-Chlorophenyl phenyl ether	6.67	5.41		mg/Kg		81	47 - 109	8	39
Chrysene	6.67	5.70		mg/Kg		86	46 - 111	5	39
Dibenz(a,h)anthracene	6.67	5.77		mg/Kg		87	39 - 127	3	45
Di-n-butyl phthalate	6.67	6.09		mg/Kg		91	43 - 121	2	38
3,3'-Dichlorobenzidine	6.67	6.11		mg/Kg		92	19 - 122	6	40
Diethyl phthalate	6.67	5.89		mg/Kg		88	47 - 115	7	38
Dimethyl phthalate	6.67	5.64		mg/Kg		85	49 - 111	5	37
2,4-Dinitrotoluene	6.67	5.92		mg/Kg		89	45 - 124	7	41
2,6-Dinitrotoluene	6.67	6.52		mg/Kg		98	50 - 122	6	40
Di-n-octyl phthalate	6.67	7.54		mg/Kg		113	33 - 129	1	41
Fluoranthene	6.67	5.83		mg/Kg		87	40 - 120	2	36
Fluorene	6.67	5.67		mg/Kg		85	46 - 109	4	40
Hexachlorobenzene	6.67	5.84		mg/Kg		88	47 - 108	3	43
Hexachlorobutadiene	6.67	5.62		mg/Kg		84	43 - 107	3	39
Hexachlorocyclopentadiene	6.67	5.55		mg/Kg		83	23 - 129	7	49
Hexachloroethane	6.67	5.66		mg/Kg		85	37 - 97	3	48
Indeno[1,2,3-cd]pyrene	6.67	5.62		mg/Kg		84	41 - 125	3	47
Isophorone	6.67	5.87		mg/Kg		88	47 - 110	0	37
2-Methylnaphthalene	6.67	5.88		mg/Kg		88	45 - 100	3	40
Naphthalene	6.67	5.71		mg/Kg		86	43 - 100	2	32
2-Nitroaniline	6.67	6.10		mg/Kg		92	45 - 117	5	42
3-Nitroaniline	6.67	6.20		mg/Kg		93	34 - 122	6	39
4-Nitroaniline	6.67	5.92		mg/Kg		89	38 - 123	7	40
Nitrobenzene	6.67	5.68		mg/Kg		85	43 - 104	1	33
N-Nitrosodi-n-propylamine	6.67	5.92		mg/Kg		89	42 - 107	1	43
N-Nitrosodiphenylamine	6.67	5.88		mg/Kg		88	44 - 111	3	40
Phenanthrene	6.67	6.27		mg/Kg		94	43 - 108	6	39
Pyrene	6.67	6.24		mg/Kg		94	41 - 115	1	43
4-Chloro-3-methylphenol	6.67	6.19		mg/Kg		93	47 - 109	0	36
2-Chlorophenol	6.67	5.75		mg/Kg		86	40 - 101	2	42
Aniline	6.67	5.52		mg/Kg		83	21 - 94	1	45
2-Methylphenol	6.67	5.78		mg/Kg		87	40 - 104	1	41
2,4-Dichlorophenol	6.67	6.07		mg/Kg		91	47 - 105	1	35
2,4-Dimethylphenol	6.67	5.98		mg/Kg		90	44 - 105	2	49
2,4-Dinitrophenol	6.67	6.97		mg/Kg		105	10 - 146	8	83
4,6-Dinitro-2-methylphenol	6.67	6.48		mg/Kg		97	24 - 134	2	87
2-Nitrophenol	6.67	6.19		mg/Kg		93	46 - 106	1	39
Benzyl alcohol	6.67	5.79		mg/Kg		87	39 - 108	1	45
4-Nitrophenol	6.67	5.84		mg/Kg		88	36 - 127	9	43
Pentachlorophenol	6.67	6.28		mg/Kg		94	17 - 122	4	52
Phenol	6.67	5.69		mg/Kg		85	41 - 102	1	39
2,4,5-Trichlorophenol	6.67	5.32		mg/Kg		80	48 - 108	9	44
2,4,6-Trichlorophenol	6.67	6.20		mg/Kg		93	50 - 106	5	42
Caprolactam	6.67	6.94		mg/Kg		104	30 - 150	8	40
Benzaldehyde	6.67	3.27		mg/Kg		49	30 - 150	1	40
Benzoic acid	6.67	7.22		mg/Kg		108	11 - 133	2	13
Benzidine	6.67	5.47	J	mg/Kg		82	30 - 120	13	30
1,4-Dioxane	6.67	4.91		mg/Kg		74	41 - 102	5	35

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-19851/3-A

Matrix: Solid

Analysis Batch: 20338

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19851

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Diphenylhydrazine(as Azobenzene)	6.67	5.24		mg/Kg		79	43 - 113	15	41

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5	85		25 - 104
2-Fluorobiphenyl	81		35 - 105
Terphenyl-d14	98		25 - 127
Phenol-d5	93		25 - 105
2-Fluorophenol	92		39 - 103
2,4,6-Tribromophenol	93		35 - 124

Lab Sample ID: MB 180-20427/1-A

Matrix: Solid

Analysis Batch: 20547

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20427

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.33	0.025	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Acenaphthene	ND		0.067	0.0064	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Acetophenone	ND		0.33	0.027	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Acenaphthylene	ND		0.067	0.0076	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Anthracene	ND		0.067	0.0065	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzo[a]anthracene	ND		0.067	0.0084	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzo[a]pyrene	ND		0.067	0.0067	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzo[b]fluoranthene	ND		0.067	0.010	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzo[g,h,i]perylene	ND		0.067	0.0066	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzo[k]fluoranthene	ND		0.067	0.013	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Bis(2-chloroethyl)ether	ND		0.067	0.0090	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Bis(2-chloroethoxy)methane	ND		0.33	0.022	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2,2'-oxybis[1-chloropropane]	ND		0.067	0.0072	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Bis(2-ethylhexyl) phthalate	ND		0.67	0.054	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
4-Bromophenyl phenyl ether	ND		0.33	0.029	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Butyl benzyl phthalate	ND		0.33	0.046	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Carbazole	ND		0.067	0.0061	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
4-Chloroaniline	ND		0.33	0.027	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2-Chloronaphthalene	ND		0.067	0.0070	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
4-Chlorophenyl phenyl ether	ND		0.33	0.037	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Chrysene	ND		0.067	0.0079	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Dibenz(a,h)anthracene	ND		0.067	0.0074	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Di-n-butyl phthalate	ND		0.33	0.042	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
3,3'-Dichlorobenzidine	ND		0.33	0.035	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Diethyl phthalate	ND		0.33	0.036	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Dimethyl phthalate	ND		0.33	0.036	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2,4-Dinitrotoluene	ND		0.33	0.027	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2,6-Dinitrotoluene	ND		0.33	0.034	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Di-n-octyl phthalate	ND		0.33	0.035	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Fluoranthene	ND		0.067	0.0071	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Fluorene	ND		0.067	0.0088	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Hexachlorobenzene	ND		0.067	0.0071	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Hexachlorobutadiene	ND		0.067	0.0075	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Hexachlorocyclopentadiene	ND		0.33	0.036	mg/Kg		11/11/11 03:04	11/11/11 11:20	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-20427/1-A

Matrix: Solid

Analysis Batch: 20547

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20427

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		0.33	0.024	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Indeno[1,2,3-cd]pyrene	ND		0.067	0.0069	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Isophorone	ND		0.33	0.025	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2-Methylnaphthalene	ND		0.067	0.0060	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Naphthalene	ND		0.067	0.0057	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2-Nitroaniline	ND		1.7	0.15	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
3-Nitroaniline	ND		1.7	0.14	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
4-Nitroaniline	ND		1.7	0.14	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Nitrobenzene	ND		0.67	0.028	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
N-Nitrosodi-n-propylamine	ND		0.067	0.0078	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
N-Nitrosodiphenylamine	ND		0.33	0.031	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Phenanthrene	ND		0.067	0.011	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Pyrene	ND		0.067	0.0067	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
4-Chloro-3-methylphenol	ND		0.33	0.031	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2-Chlorophenol	ND		0.33	0.027	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Aniline	ND		0.33	0.026	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2-Methylphenol	ND		0.33	0.023	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Methylphenol, 3 & 4	ND		0.33	0.033	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2,4-Dichlorophenol	ND		0.067	0.0067	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2,4-Dimethylphenol	ND		0.33	0.052	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2,4-Dinitrophenol	ND		1.7	0.40	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
4,6-Dinitro-2-methylphenol	ND		1.7	0.13	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2-Nitrophenol	ND		0.33	0.037	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzyl alcohol	ND		0.33	0.040	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
4-Nitrophenol	ND		1.7	0.12	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Pentachlorophenol	ND		0.33	0.030	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Phenol	ND		0.067	0.0079	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2,4,5-Trichlorophenol	ND		0.33	0.036	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
2,4,6-Trichlorophenol	ND		0.33	0.050	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
1,1'-Biphenyl	ND		0.33	0.030	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Caprolactam	ND		1.7	0.25	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzaldehyde	ND		0.33	0.050	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Atrazine	ND		0.33	0.032	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzoic acid	ND		1.7	0.14	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
Benzidine	ND		6.7	1.4	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
1,4-Dioxane	ND		0.67	0.038	mg/Kg		11/11/11 03:04	11/11/11 11:20	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.33	0.043	mg/Kg		11/11/11 03:04	11/11/11 11:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	68		25 - 104	11/11/11 03:04	11/11/11 11:20	1
2-Fluorobiphenyl	71		35 - 105	11/11/11 03:04	11/11/11 11:20	1
Terphenyl-d14	82		25 - 127	11/11/11 03:04	11/11/11 11:20	1
Phenol-d5	80		25 - 105	11/11/11 03:04	11/11/11 11:20	1
2-Fluorophenol	76		39 - 103	11/11/11 03:04	11/11/11 11:20	1
2,4,6-Tribromophenol	90		35 - 124	11/11/11 03:04	11/11/11 11:20	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-20427/1-A

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20427

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dimethylbenzidine	ND		1.7	0.018	mg/Kg		11/11/11 03:04	11/14/11 14:41	1
o-Toluidine	ND		0.33	0.025	mg/Kg		11/11/11 03:04	11/14/11 14:41	1

Lab Sample ID: LCS 180-20427/2-A

Matrix: Solid

Analysis Batch: 20547

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20427

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	6.67	4.85		mg/Kg		73	30 - 125
Acenaphthene	6.67	5.19		mg/Kg		78	47 - 104
Acenaphthylene	6.67	5.29		mg/Kg		79	49 - 114
Anthracene	6.67	5.01		mg/Kg		75	45 - 112
Benzo[a]anthracene	6.67	5.72		mg/Kg		86	47 - 110
Benzo[a]pyrene	6.67	5.44		mg/Kg		82	47 - 112
Benzo[b]fluoranthene	6.67	5.95		mg/Kg		89	41 - 107
Benzo[g,h,i]perylene	6.67	4.87		mg/Kg		73	38 - 126
Benzo[k]fluoranthene	6.67	4.79		mg/Kg		72	44 - 115
Bis(2-chloroethyl)ether	6.67	4.86		mg/Kg		73	38 - 99
Bis(2-chloroethoxy)methane	6.67	4.99		mg/Kg		75	44 - 101
2,2'-oxybis[1-chloropropane]	6.67	4.71		mg/Kg		71	36 - 101
Bis(2-ethylhexyl) phthalate	6.67	5.45		mg/Kg		82	40 - 122
4-Bromophenyl phenyl ether	6.67	5.35		mg/Kg		80	47 - 110
Butyl benzyl phthalate	6.67	5.31		mg/Kg		80	41 - 118
Carbazole	6.67	4.81		mg/Kg		72	45 - 114
4-Chloroaniline	6.67	5.31		mg/Kg		80	25 - 108
2-Chloronaphthalene	6.67	4.94		mg/Kg		74	46 - 101
4-Chlorophenyl phenyl ether	6.67	5.23		mg/Kg		78	47 - 109
Chrysene	6.67	5.09		mg/Kg		76	46 - 111
Dibenz(a,h)anthracene	6.67	5.31		mg/Kg		80	39 - 127
Di-n-butyl phthalate	6.67	5.07		mg/Kg		76	43 - 121
3,3'-Dichlorobenzidine	6.67	4.98		mg/Kg		75	19 - 122
Diethyl phthalate	6.67	5.17		mg/Kg		78	47 - 115
Dimethyl phthalate	6.67	5.11		mg/Kg		77	49 - 111
2,4-Dinitrotoluene	6.67	5.34		mg/Kg		80	45 - 124
2,6-Dinitrotoluene	6.67	5.42		mg/Kg		81	50 - 122
Di-n-octyl phthalate	6.67	6.21		mg/Kg		93	33 - 129
Fluoranthene	6.67	5.01		mg/Kg		75	40 - 120
Fluorene	6.67	5.23		mg/Kg		78	46 - 109
Hexachlorobenzene	6.67	5.22		mg/Kg		78	47 - 108
Hexachlorobutadiene	6.67	4.91		mg/Kg		74	43 - 107
Hexachlorocyclopentadiene	6.67	5.24		mg/Kg		79	23 - 129
Hexachloroethane	6.67	4.70		mg/Kg		70	37 - 97
Indeno[1,2,3-cd]pyrene	6.67	5.00		mg/Kg		75	41 - 125
Isophorone	6.67	5.23		mg/Kg		78	47 - 110
2-Methylnaphthalene	6.67	5.18		mg/Kg		78	45 - 100
Naphthalene	6.67	4.93		mg/Kg		74	43 - 100
2-Nitroaniline	6.67	5.29		mg/Kg		79	45 - 117
3-Nitroaniline	6.67	5.06		mg/Kg		76	34 - 122
4-Nitroaniline	6.67	5.02		mg/Kg		75	38 - 123
Nitrobenzene	6.67	4.85		mg/Kg		73	43 - 104

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-20427/2-A

Matrix: Solid

Analysis Batch: 20547

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20427

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodi-n-propylamine	6.67	4.98		mg/Kg		75	42 - 107
N-Nitrosodiphenylamine	6.67	5.25		mg/Kg		79	44 - 111
Phenanthrene	6.67	5.52		mg/Kg		83	43 - 108
Pyrene	6.67	5.36		mg/Kg		80	41 - 115
4-Chloro-3-methylphenol	6.67	5.51		mg/Kg		83	47 - 109
2-Chlorophenol	6.67	4.86		mg/Kg		73	40 - 101
Aniline	6.67	5.21		mg/Kg		78	21 - 94
2-Methylphenol	6.67	4.87		mg/Kg		73	40 - 104
2,4-Dichlorophenol	6.67	5.37		mg/Kg		81	47 - 105
2,4-Dimethylphenol	6.67	5.11		mg/Kg		77	44 - 105
2,4-Dinitrophenol	6.67	5.02		mg/Kg		75	10 - 146
4,6-Dinitro-2-methylphenol	6.67	5.43		mg/Kg		81	24 - 134
2-Nitrophenol	6.67	5.21		mg/Kg		78	46 - 106
Benzyl alcohol	6.67	4.19		mg/Kg		63	39 - 108
4-Nitrophenol	6.67	5.16		mg/Kg		77	36 - 127
Pentachlorophenol	6.67	5.05		mg/Kg		76	17 - 122
Phenol	6.67	4.67		mg/Kg		70	41 - 102
2,4,5-Trichlorophenol	6.67	5.22		mg/Kg		78	48 - 108
2,4,6-Trichlorophenol	6.67	5.54		mg/Kg		83	50 - 106
Caprolactam	6.67	5.77		mg/Kg		86	30 - 150
Benzaldehyde	6.67	2.35		mg/Kg		35	30 - 150
Benzoic acid	6.67	4.69		mg/Kg		70	11 - 133
Benzidine	6.67	4.10	J	mg/Kg		62	30 - 120
1,4-Dioxane	6.67	4.12		mg/Kg		62	41 - 102
1,2-Diphenylhydrazine(as Azobenzene)	6.67	4.78		mg/Kg		72	43 - 113

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	73		25 - 104
2-Fluorobiphenyl	77		35 - 105
Terphenyl-d14	84		25 - 127
Phenol-d5	80		25 - 105
2-Fluorophenol	82		39 - 103
2,4,6-Tribromophenol	88		35 - 124

Lab Sample ID: MB 180-20532/1-A

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20532

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.33	0.025	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Acenaphthene	ND		0.067	0.0064	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Acetophenone	ND		0.33	0.027	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Acenaphthylene	ND		0.067	0.0076	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Anthracene	ND		0.067	0.0065	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzo[a]anthracene	ND		0.067	0.0084	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzo[a]pyrene	ND		0.067	0.0067	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzo[b]fluoranthene	ND		0.067	0.010	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzo[g,h,i]perylene	ND		0.067	0.0066	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzo[k]fluoranthene	ND		0.067	0.013	mg/Kg		11/12/11 03:15	11/14/11 15:01	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-20532/1-A

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20532

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		0.067	0.0090	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Bis(2-chloroethoxy)methane	ND		0.33	0.022	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2,2'-oxybis[1-chloropropane]	ND		0.067	0.0072	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Bis(2-ethylhexyl) phthalate	ND		0.67	0.054	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
4-Bromophenyl phenyl ether	ND		0.33	0.029	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Butyl benzyl phthalate	ND		0.33	0.046	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Carbazole	ND		0.067	0.0061	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
4-Chloroaniline	ND		0.33	0.027	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2-Chloronaphthalene	ND		0.067	0.0070	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
4-Chlorophenyl phenyl ether	ND		0.33	0.037	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Chrysene	ND		0.067	0.0079	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Dibenz(a,h)anthracene	ND		0.067	0.0074	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Di-n-butyl phthalate	ND		0.33	0.042	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
3,3'-Dichlorobenzidine	ND		0.33	0.035	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Diethyl phthalate	ND		0.33	0.036	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Dimethyl phthalate	ND		0.33	0.036	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2,4-Dinitrotoluene	ND		0.33	0.027	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2,6-Dinitrotoluene	ND		0.33	0.034	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Di-n-octyl phthalate	ND		0.33	0.035	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Fluoranthene	ND		0.067	0.0071	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Fluorene	ND		0.067	0.0088	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Hexachlorobenzene	ND		0.067	0.0071	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
3,3'-Dimethylbenzidine	ND		1.7	0.018	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Hexachlorobutadiene	ND		0.067	0.0075	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Hexachlorocyclopentadiene	ND		0.33	0.036	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Hexachloroethane	ND		0.33	0.024	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Indeno[1,2,3-cd]pyrene	ND		0.067	0.0069	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Isophorone	ND		0.33	0.025	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2-Methylnaphthalene	ND		0.067	0.0060	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Naphthalene	ND		0.067	0.0057	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2-Nitroaniline	ND		1.7	0.15	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
3-Nitroaniline	ND		1.7	0.14	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
4-Nitroaniline	ND		1.7	0.14	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Nitrobenzene	ND		0.67	0.028	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
N-Nitrosodi-n-propylamine	ND		0.067	0.0078	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
N-Nitrosodiphenylamine	ND		0.33	0.031	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Phenanthrene	ND		0.067	0.011	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Pyrene	ND		0.067	0.0067	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
4-Chloro-3-methylphenol	ND		0.33	0.031	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2-Chlorophenol	ND		0.33	0.027	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Aniline	ND		0.33	0.026	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2-Methylphenol	ND		0.33	0.023	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Methylphenol, 3 & 4	ND		0.33	0.033	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2,4-Dichlorophenol	ND		0.067	0.0067	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2,4-Dimethylphenol	ND		0.33	0.052	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2,4-Dinitrophenol	ND		1.7	0.40	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
4,6-Dinitro-2-methylphenol	ND		1.7	0.13	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2-Nitrophenol	ND		0.33	0.037	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzyl alcohol	ND		0.33	0.040	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
4-Nitrophenol	ND		1.7	0.12	mg/Kg		11/12/11 03:15	11/14/11 15:01	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-20532/1-A

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20532

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.33	0.030	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Phenol	ND		0.067	0.0079	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2,4,5-Trichlorophenol	ND		0.33	0.036	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
2,4,6-Trichlorophenol	ND		0.33	0.050	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
1,1'-Biphenyl	ND		0.33	0.030	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Caprolactam	ND		1.7	0.25	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzaldehyde	ND		0.33	0.050	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Atrazine	ND		0.33	0.032	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzoic acid	ND		1.7	0.14	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
Benzidine	ND		6.7	1.4	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
1,4-Dioxane	ND		0.67	0.038	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.33	0.043	mg/Kg		11/12/11 03:15	11/14/11 15:01	1
o-Toluidine	ND		0.33	0.025	mg/Kg		11/12/11 03:15	11/14/11 15:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		25 - 104	11/12/11 03:15	11/14/11 15:01	1
2-Fluorobiphenyl	66		35 - 105	11/12/11 03:15	11/14/11 15:01	1
Terphenyl-d14	62		25 - 127	11/12/11 03:15	11/14/11 15:01	1
Phenol-d5	80		25 - 105	11/12/11 03:15	11/14/11 15:01	1
2-Fluorophenol	73		39 - 103	11/12/11 03:15	11/14/11 15:01	1
2,4,6-Tribromophenol	73		35 - 124	11/12/11 03:15	11/14/11 15:01	1

Lab Sample ID: LCS 180-20532/2-A

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	6.67	4.81		mg/Kg		72	30 - 125
Acenaphthene	6.67	5.03		mg/Kg		75	47 - 104
Acetophenone	6.67	4.99		mg/Kg		75	30 - 150
Acenaphthylene	6.67	5.22		mg/Kg		78	49 - 114
Anthracene	6.67	4.96		mg/Kg		74	45 - 112
Benzo[a]anthracene	6.67	5.56		mg/Kg		83	47 - 110
Benzo[a]pyrene	6.67	5.48		mg/Kg		82	47 - 112
Benzo[b]fluoranthene	6.67	5.12		mg/Kg		77	41 - 107
Benzo[g,h,i]perylene	6.67	5.68		mg/Kg		85	38 - 126
Benzo[k]fluoranthene	6.67	4.99		mg/Kg		75	44 - 115
Bis(2-chloroethyl)ether	6.67	4.72		mg/Kg		71	38 - 99
Bis(2-chloroethoxy)methane	6.67	5.05		mg/Kg		76	44 - 101
2,2'-oxybis[1-chloropropane]	6.67	4.53		mg/Kg		68	36 - 101
Bis(2-ethylhexyl) phthalate	6.67	5.39		mg/Kg		81	40 - 122
4-Bromophenyl phenyl ether	6.67	5.15		mg/Kg		77	47 - 110
Butyl benzyl phthalate	6.67	5.73		mg/Kg		86	41 - 118
Carbazole	6.67	4.79		mg/Kg		72	45 - 114
4-Chloroaniline	6.67	5.14		mg/Kg		77	25 - 108
2-Chloronaphthalene	6.67	4.71		mg/Kg		71	46 - 101
4-Chlorophenyl phenyl ether	6.67	4.95		mg/Kg		74	47 - 109
Chrysene	6.67	5.24		mg/Kg		79	46 - 111
Dibenz(a,h)anthracene	6.67	5.59		mg/Kg		84	39 - 127

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-20532/2-A

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-butyl phthalate	6.67	4.98		mg/Kg		75	43 - 121
3,3'-Dichlorobenzidine	6.67	5.58		mg/Kg		84	19 - 122
Diethyl phthalate	6.67	5.11		mg/Kg		77	47 - 115
Dimethyl phthalate	6.67	5.00		mg/Kg		75	49 - 111
2,4-Dinitrotoluene	6.67	5.14		mg/Kg		77	45 - 124
2,6-Dinitrotoluene	6.67	5.62		mg/Kg		84	50 - 122
Di-n-octyl phthalate	6.67	5.37		mg/Kg		81	33 - 129
Fluoranthene	6.67	5.07		mg/Kg		76	40 - 120
Fluorene	6.67	5.01		mg/Kg		75	46 - 109
Hexachlorobenzene	6.67	5.20		mg/Kg		78	47 - 108
Hexachlorobutadiene	6.67	4.96		mg/Kg		74	43 - 107
Hexachlorocyclopentadiene	6.67	4.88		mg/Kg		73	23 - 129
Hexachloroethane	6.67	4.78		mg/Kg		72	37 - 97
Indeno[1,2,3-cd]pyrene	6.67	5.29		mg/Kg		79	41 - 125
Isophorone	6.67	5.06		mg/Kg		76	47 - 110
2-Methylnaphthalene	6.67	5.09		mg/Kg		76	45 - 100
Naphthalene	6.67	5.08		mg/Kg		76	43 - 100
2-Nitroaniline	6.67	5.13		mg/Kg		77	45 - 117
3-Nitroaniline	6.67	5.40		mg/Kg		81	34 - 122
4-Nitroaniline	6.67	5.16		mg/Kg		77	38 - 123
Nitrobenzene	6.67	4.89		mg/Kg		73	43 - 104
N-Nitrosodi-n-propylamine	6.67	4.92		mg/Kg		74	42 - 107
N-Nitrosodiphenylamine	6.67	5.17		mg/Kg		77	44 - 111
Phenanthrene	6.67	4.99		mg/Kg		75	43 - 108
Pyrene	6.67	5.43		mg/Kg		81	41 - 115
4-Chloro-3-methylphenol	6.67	5.26		mg/Kg		79	47 - 109
2-Chlorophenol	6.67	4.80		mg/Kg		72	40 - 101
Aniline	6.67	5.21		mg/Kg		78	21 - 94
2-Methylphenol	6.67	4.84		mg/Kg		73	40 - 104
2,4-Dichlorophenol	6.67	5.13		mg/Kg		77	47 - 105
2,4-Dimethylphenol	6.67	5.06		mg/Kg		76	44 - 105
2,4-Dinitrophenol	6.67	4.95		mg/Kg		74	10 - 146
4,6-Dinitro-2-methylphenol	6.67	5.20		mg/Kg		78	24 - 134
2-Nitrophenol	6.67	5.19		mg/Kg		78	46 - 106
Benzyl alcohol	6.67	4.98		mg/Kg		75	39 - 108
4-Nitrophenol	6.67	5.19		mg/Kg		78	36 - 127
Pentachlorophenol	6.67	4.96		mg/Kg		74	17 - 122
Phenol	6.67	4.81		mg/Kg		72	41 - 102
2,4,5-Trichlorophenol	6.67	5.04		mg/Kg		76	48 - 108
2,4,6-Trichlorophenol	6.67	5.33		mg/Kg		80	50 - 106
1,1'-Biphenyl	6.67	4.86		mg/Kg		73	30 - 150
Caprolactam	6.67	5.73		mg/Kg		86	30 - 150
Benzaldehyde	6.67	2.55		mg/Kg		38	30 - 150
Atrazine	6.67	8.82		mg/Kg		132	30 - 150
Benzoic acid	6.67	5.33		mg/Kg		80	11 - 133
Benzidine	6.67	4.19	J	mg/Kg		63	30 - 120
1,4-Dioxane	6.67	4.52		mg/Kg		68	41 - 102
1,2-Diphenylhydrazine(as Azobenzene)	6.67	4.64		mg/Kg		70	43 - 113

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-20532/2-A

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20532

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	75		25 - 104
2-Fluorobiphenyl	74		35 - 105
Terphenyl-d14	82		25 - 127
Phenol-d5	79		25 - 105
2-Fluorophenol	79		39 - 103
2,4,6-Tribromophenol	88		35 - 124

Lab Sample ID: 180-5679-2 MS

Matrix: Solid

Analysis Batch: 21184

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	ND		7.86	6.72		mg/Kg	☼	86	30 - 125
Acenaphthene	0.026	J	7.86	7.15		mg/Kg	☼	91	47 - 104
Acetophenone	ND		7.86	7.36		mg/Kg	☼	94	30 - 150
Acenaphthylene	ND		7.86	7.32		mg/Kg	☼	93	49 - 114
Anthracene	0.026	J	7.86	6.98		mg/Kg	☼	89	45 - 112
Benzo[a]anthracene	0.025	J	7.86	6.34		mg/Kg	☼	80	47 - 110
Benzo[a]pyrene	0.022	J	7.86	8.08		mg/Kg	☼	103	47 - 112
Benzo[b]fluoranthene	0.023	J	7.86	8.17		mg/Kg	☼	104	41 - 107
Benzo[g,h,i]perylene	0.017	J	7.86	7.36		mg/Kg	☼	93	38 - 126
Benzo[k]fluoranthene	0.022	J	7.86	6.59		mg/Kg	☼	84	44 - 115
Bis(2-chloroethyl)ether	ND		7.86	6.81		mg/Kg	☼	87	38 - 99
Bis(2-chloroethoxy)methane	ND		7.86	7.28		mg/Kg	☼	93	44 - 101
2,2'-oxybis[1-chloropropane]	ND		7.86	6.63		mg/Kg	☼	84	36 - 101
Bis(2-ethylhexyl) phthalate	ND		7.86	7.72		mg/Kg	☼	98	40 - 122
4-Bromophenyl phenyl ether	ND		7.86	7.75		mg/Kg	☼	99	47 - 110
Butyl benzyl phthalate	ND		7.86	7.58		mg/Kg	☼	97	41 - 118
Carbazole	ND		7.86	7.25		mg/Kg	☼	92	45 - 114
4-Chloroaniline	ND		7.86	7.35		mg/Kg	☼	93	25 - 108
2-Chloronaphthalene	ND		7.86	6.55		mg/Kg	☼	83	46 - 101
4-Chlorophenyl phenyl ether	ND		7.86	6.79		mg/Kg	☼	86	47 - 109
Chrysene	0.030	J	7.86	6.94		mg/Kg	☼	88	46 - 111
Dibenz(a,h)anthracene	ND		7.86	7.39		mg/Kg	☼	94	39 - 127
Di-n-butyl phthalate	ND		7.86	7.33		mg/Kg	☼	93	43 - 121
3,3'-Dichlorobenzidine	ND		7.86	7.62		mg/Kg	☼	97	19 - 122
Diethyl phthalate	ND		7.86	7.47		mg/Kg	☼	95	47 - 115
Dimethyl phthalate	ND		7.86	7.34		mg/Kg	☼	93	49 - 111
2,4-Dinitrotoluene	ND		7.86	7.49		mg/Kg	☼	95	45 - 124
2,6-Dinitrotoluene	ND		7.86	8.15		mg/Kg	☼	104	50 - 122
Di-n-octyl phthalate	ND		7.86	8.86		mg/Kg	☼	113	33 - 129
Fluoranthene	0.084		7.86	6.89		mg/Kg	☼	87	40 - 120
Fluorene	0.071	J	7.86	6.99		mg/Kg	☼	88	46 - 109
Hexachlorobenzene	ND		7.86	7.62		mg/Kg	☼	97	47 - 108
Hexachlorobutadiene	ND		7.86	6.94		mg/Kg	☼	88	43 - 107
Hexachlorocyclopentadiene	ND		7.86	6.38		mg/Kg	☼	81	23 - 129
Hexachloroethane	ND		7.86	6.97		mg/Kg	☼	89	37 - 97
Indeno[1,2,3-cd]pyrene	0.013	J	7.86	7.17		mg/Kg	☼	91	41 - 125
Isophorone	ND		7.86	7.22		mg/Kg	☼	92	47 - 110

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-5679-2 MS

Matrix: Solid

Analysis Batch: 21184

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	0.062	J	7.86	7.41		mg/Kg	☼	93	45 - 100
Naphthalene	0.028	J	7.86	7.11		mg/Kg	☼	90	43 - 100
2-Nitroaniline	ND		7.86	7.58		mg/Kg	☼	96	45 - 117
3-Nitroaniline	ND		7.86	8.11		mg/Kg	☼	103	34 - 122
4-Nitroaniline	ND		7.86	7.54		mg/Kg	☼	96	38 - 123
Nitrobenzene	ND		7.86	6.91		mg/Kg	☼	88	43 - 104
N-Nitrosodi-n-propylamine	ND		7.86	7.37		mg/Kg	☼	94	42 - 107
N-Nitrosodiphenylamine	ND		7.86	8.41		mg/Kg	☼	107	44 - 111
Phenanthrene	0.18		7.86	8.11		mg/Kg	☼	101	43 - 108
Pyrene	0.055	J	7.86	7.30		mg/Kg	☼	92	41 - 115
4-Chloro-3-methylphenol	ND		7.86	7.75		mg/Kg	☼	99	47 - 109
2-Chlorophenol	ND		7.86	6.67		mg/Kg	☼	85	40 - 101
Aniline	ND		7.86	7.48	F	mg/Kg	☼	95	21 - 94
2-Methylphenol	ND		7.86	7.08		mg/Kg	☼	90	40 - 104
2,4-Dichlorophenol	ND		7.86	6.92		mg/Kg	☼	88	47 - 105
2,4-Dimethylphenol	ND		7.86	6.63		mg/Kg	☼	84	44 - 105
2,4-Dinitrophenol	ND		7.86	ND	F	mg/Kg	☼	0	10 - 146
4,6-Dinitro-2-methylphenol	ND		7.86	1.52	J F	mg/Kg	☼	19	24 - 134
2-Nitrophenol	ND		7.86	6.59		mg/Kg	☼	84	46 - 106
Benzyl alcohol	ND		7.86	7.44		mg/Kg	☼	95	39 - 108
4-Nitrophenol	ND		7.86	5.77		mg/Kg	☼	73	36 - 127
Pentachlorophenol	ND		7.86	0.562	F	mg/Kg	☼	7	17 - 122
Phenol	ND		7.86	6.98		mg/Kg	☼	89	41 - 102
2,4,5-Trichlorophenol	ND		7.86	5.61		mg/Kg	☼	71	48 - 108
2,4,6-Trichlorophenol	ND		7.86	4.74		mg/Kg	☼	60	50 - 106
1,1'-Biphenyl	ND		7.86	6.71		mg/Kg	☼	85	30 - 150
Caprolactam	ND		7.86	7.39		mg/Kg	☼	94	30 - 150
Benzaldehyde	ND		7.86	3.46		mg/Kg	☼	44	30 - 150
Atrazine	ND		7.86	14.5	F	mg/Kg	☼	185	30 - 150
Benzoic acid	ND		7.86	ND	F	mg/Kg	☼	0	11 - 133
Benzidine	ND		7.86	9.28		mg/Kg	☼	118	30 - 120
1,4-Dioxane	ND		7.86	5.62		mg/Kg	☼	71	41 - 102
1,2-Diphenylhydrazine(as Azobenzene)	ND		7.86	7.74		mg/Kg	☼	98	43 - 113

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5	89		25 - 104
2-Fluorobiphenyl	88		35 - 105
Terphenyl-d14	94		25 - 127
Phenol-d5	96		25 - 105
2-Fluorophenol	85		39 - 103
2,4,6-Tribromophenol	66		35 - 124

Lab Sample ID: 180-5679-2 MSD

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	ND		7.86	5.30		mg/Kg	☼	67	30 - 125	24	25
Acenaphthene	0.026	J	7.86	5.54		mg/Kg	☼	70	47 - 104	25	40

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-5679-2 MSD

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetophenone	ND		7.86	5.40		mg/Kg	✱	69	30 - 150	31	40
Acenaphthylene	ND		7.86	5.75		mg/Kg	✱	73	49 - 114	24	38
Anthracene	0.026	J	7.86	5.36		mg/Kg	✱	68	45 - 112	26	42
Benzo[a]anthracene	0.025	J	7.86	5.62		mg/Kg	✱	71	47 - 110	12	40
Benzo[a]pyrene	0.022	J	7.86	5.85		mg/Kg	✱	74	47 - 112	32	42
Benzo[b]fluoranthene	0.023	J	7.86	5.03		mg/Kg	✱	64	41 - 107	48	53
Benzo[g,h,i]perylene	0.017	J	7.86	6.01		mg/Kg	✱	76	38 - 126	20	43
Benzo[k]fluoranthene	0.022	J	7.86	5.56		mg/Kg	✱	70	44 - 115	17	44
Bis(2-chloroethyl)ether	ND		7.86	5.25		mg/Kg	✱	67	38 - 99	26	43
Bis(2-chloroethoxy)methane	ND		7.86	5.54		mg/Kg	✱	70	44 - 101	27	36
2,2'-oxybis[1-chloropropane]	ND		7.86	5.05		mg/Kg	✱	64	36 - 101	27	41
Bis(2-ethylhexyl) phthalate	ND		7.86	5.66		mg/Kg	✱	72	40 - 122	31	41
4-Bromophenyl phenyl ether	ND		7.86	5.78		mg/Kg	✱	74	47 - 110	29	46
Butyl benzyl phthalate	ND		7.86	5.86		mg/Kg	✱	75	41 - 118	26	41
Carbazole	ND		7.86	5.47		mg/Kg	✱	70	45 - 114	28	36
4-Chloroaniline	ND		7.86	5.55		mg/Kg	✱	71	25 - 108	28	36
2-Chloronaphthalene	ND		7.86	5.24		mg/Kg	✱	67	46 - 101	22	40
4-Chlorophenyl phenyl ether	ND		7.86	5.20		mg/Kg	✱	66	47 - 109	27	39
Chrysene	0.030	J	7.86	5.38		mg/Kg	✱	68	46 - 111	25	39
Dibenz(a,h)anthracene	ND		7.86	5.91		mg/Kg	✱	75	39 - 127	22	45
Di-n-butyl phthalate	ND		7.86	5.47		mg/Kg	✱	70	43 - 121	29	38
3,3'-Dichlorobenzidine	ND		7.86	5.83		mg/Kg	✱	74	19 - 122	27	40
Diethyl phthalate	ND		7.86	5.60		mg/Kg	✱	71	47 - 115	29	38
Dimethyl phthalate	ND		7.86	5.59		mg/Kg	✱	71	49 - 111	27	37
2,4-Dinitrotoluene	ND		7.86	5.70		mg/Kg	✱	73	45 - 124	27	41
2,6-Dinitrotoluene	ND		7.86	6.30		mg/Kg	✱	80	50 - 122	26	40
Di-n-octyl phthalate	ND		7.86	5.84		mg/Kg	✱	74	33 - 129	41	41
Fluoranthene	0.084		7.86	5.85		mg/Kg	✱	73	40 - 120	16	36
Fluorene	0.071	J	7.86	5.43		mg/Kg	✱	68	46 - 109	25	40
Hexachlorobenzene	ND		7.86	5.73		mg/Kg	✱	73	47 - 108	28	43
Hexachlorobutadiene	ND		7.86	5.42		mg/Kg	✱	69	43 - 107	25	39
Hexachlorocyclopentadiene	ND		7.86	4.93		mg/Kg	✱	63	23 - 129	26	49
Hexachloroethane	ND		7.86	5.20		mg/Kg	✱	66	37 - 97	29	48
Indeno[1,2,3-cd]pyrene	0.013	J	7.86	5.67		mg/Kg	✱	72	41 - 125	23	47
Isophorone	ND		7.86	5.43		mg/Kg	✱	69	47 - 110	28	37
2-Methylnaphthalene	0.062	J	7.86	5.54		mg/Kg	✱	70	45 - 100	29	40
Naphthalene	0.028	J	7.86	5.41		mg/Kg	✱	68	43 - 100	27	32
2-Nitroaniline	ND		7.86	5.91		mg/Kg	✱	75	45 - 117	25	42
3-Nitroaniline	ND		7.86	6.15		mg/Kg	✱	78	34 - 122	27	39
4-Nitroaniline	ND		7.86	5.70		mg/Kg	✱	73	38 - 123	28	40
Nitrobenzene	ND		7.86	5.35		mg/Kg	✱	68	43 - 104	25	33
N-Nitrosodi-n-propylamine	ND		7.86	5.45		mg/Kg	✱	69	42 - 107	30	43
N-Nitrosodiphenylamine	ND		7.86	6.09		mg/Kg	✱	78	44 - 111	32	40
Phenanthrene	0.18		7.86	5.80		mg/Kg	✱	71	43 - 108	33	39
Pyrene	0.055	J	7.86	5.40		mg/Kg	✱	68	41 - 115	30	43
4-Chloro-3-methylphenol	ND		7.86	5.58		mg/Kg	✱	71	47 - 109	33	36
2-Chlorophenol	ND		7.86	5.11		mg/Kg	✱	65	40 - 101	26	42
Aniline	ND		7.86	5.53		mg/Kg	✱	70	21 - 94	30	45
2-Methylphenol	ND		7.86	5.32		mg/Kg	✱	68	40 - 104	28	41
2,4-Dichlorophenol	ND		7.86	5.21		mg/Kg	✱	66	47 - 105	28	35

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-5679-2 MSD

Matrix: Solid

Analysis Batch: 20884

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dimethylphenol	ND		7.86	5.08		mg/Kg	✖	65	44 - 105	26	49
2,4-Dinitrophenol	ND		7.86	ND	F	mg/Kg	✖	0	10 - 146	NC	83
4,6-Dinitro-2-methylphenol	ND		7.86	0.893	J F	mg/Kg	✖	11	24 - 134	52	87
2-Nitrophenol	ND		7.86	4.98		mg/Kg	✖	63	46 - 106	28	39
Benzyl alcohol	ND		7.86	5.45		mg/Kg	✖	69	39 - 108	31	45
4-Nitrophenol	ND		7.86	3.92		mg/Kg	✖	50	36 - 127	38	43
Pentachlorophenol	ND		7.86	0.364	J F	mg/Kg	✖	5	17 - 122	43	52
Phenol	ND		7.86	5.11		mg/Kg	✖	65	41 - 102	31	39
2,4,5-Trichlorophenol	ND		7.86	4.05		mg/Kg	✖	51	48 - 108	32	44
2,4,6-Trichlorophenol	ND		7.86	3.73	F	mg/Kg	✖	47	50 - 106	24	42
1,1'-Biphenyl	ND		7.86	5.35		mg/Kg	✖	68	30 - 150	23	40
Caprolactam	ND		7.86	5.99		mg/Kg	✖	76	30 - 150	21	40
Benzaldehyde	ND		7.86	2.60		mg/Kg	✖	33	30 - 150	28	40
Atrazine	ND		7.86	10.7		mg/Kg	✖	136	30 - 150	31	40
Benzoic acid	ND		7.86	ND	F	mg/Kg	✖	0	11 - 133	NC	13
Benzidine	ND		7.86	6.98	J	mg/Kg	✖	89	30 - 120	28	30
1,4-Dioxane	ND		7.86	4.46		mg/Kg	✖	57	41 - 102	23	35
1,2-Diphenylhydrazine(as Azobenzene)	ND		7.86	5.51		mg/Kg	✖	70	43 - 113	34	41

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5	68		25 - 104
2-Fluorobiphenyl	70		35 - 105
Terphenyl-d14	67		25 - 127
Phenol-d5	72		25 - 105
2-Fluorophenol	65		39 - 103
2,4,6-Tribromophenol	47		35 - 124

Lab Sample ID: MB 180-20747/1-A

Matrix: Solid

Analysis Batch: 21248

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20747

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.33	0.025	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Acenaphthene	ND		0.067	0.0064	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Acetophenone	ND		0.33	0.027	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Acenaphthylene	ND		0.067	0.0076	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Anthracene	ND		0.067	0.0065	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzo[a]anthracene	ND		0.067	0.0084	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzo[a]pyrene	ND		0.067	0.0067	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzo[b]fluoranthene	ND		0.067	0.010	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzo[g,h,i]perylene	ND		0.067	0.0066	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzo[k]fluoranthene	ND		0.067	0.013	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Bis(2-chloroethyl)ether	ND		0.067	0.0090	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Bis(2-chloroethoxy)methane	ND		0.33	0.022	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2,2'-oxybis[1-chloropropane]	ND		0.067	0.0072	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Bis(2-ethylhexyl) phthalate	ND		0.67	0.054	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
4-Bromophenyl phenyl ether	ND		0.33	0.029	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Butyl benzyl phthalate	ND		0.33	0.046	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Carbazole	ND		0.067	0.0061	mg/Kg		11/15/11 05:58	11/17/11 16:02	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-20747/1-A

Matrix: Solid

Analysis Batch: 21248

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20747

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		0.33	0.027	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2-Chloronaphthalene	ND		0.067	0.0070	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
4-Chlorophenyl phenyl ether	ND		0.33	0.037	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Chrysene	ND		0.067	0.0079	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Dibenz(a,h)anthracene	ND		0.067	0.0074	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Di-n-butyl phthalate	ND		0.33	0.042	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
3,3'-Dichlorobenzidine	ND		0.33	0.035	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Diethyl phthalate	ND		0.33	0.036	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Dimethyl phthalate	ND		0.33	0.036	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2,4-Dinitrotoluene	ND		0.33	0.027	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2,6-Dinitrotoluene	ND		0.33	0.034	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Di-n-octyl phthalate	ND		0.33	0.035	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Fluoranthene	ND		0.067	0.0071	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Fluorene	ND		0.067	0.0088	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Hexachlorobenzene	ND		0.067	0.0071	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
3,3'-Dimethylbenzidine	ND		1.7	0.018	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Hexachlorobutadiene	ND		0.067	0.0075	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Hexachlorocyclopentadiene	ND		0.33	0.036	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Hexachloroethane	ND		0.33	0.024	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Indeno[1,2,3-cd]pyrene	ND		0.067	0.0069	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Isophorone	ND		0.33	0.025	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2-Methylnaphthalene	ND		0.067	0.0060	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Naphthalene	ND		0.067	0.0057	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2-Nitroaniline	ND		1.7	0.15	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
3-Nitroaniline	ND		1.7	0.14	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
4-Nitroaniline	ND		1.7	0.14	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Nitrobenzene	ND		0.67	0.028	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
N-Nitrosodi-n-propylamine	ND		0.067	0.0078	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
N-Nitrosodiphenylamine	ND		0.33	0.031	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Phenanthrene	ND		0.067	0.011	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Pyrene	ND		0.067	0.0067	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
4-Chloro-3-methylphenol	ND		0.33	0.031	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2-Chlorophenol	ND		0.33	0.027	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Aniline	ND		0.33	0.026	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2-Methylphenol	ND		0.33	0.023	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Methylphenol, 3 & 4	ND		0.33	0.033	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2,4-Dichlorophenol	ND		0.067	0.0067	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2,4-Dimethylphenol	ND		0.33	0.052	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2,4-Dinitrophenol	ND		1.7	0.40	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
4,6-Dinitro-2-methylphenol	ND		1.7	0.13	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2-Nitrophenol	ND		0.33	0.037	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzyl alcohol	ND		0.33	0.040	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
4-Nitrophenol	ND		1.7	0.12	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Pentachlorophenol	ND		0.33	0.030	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Phenol	ND		0.067	0.0079	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2,4,5-Trichlorophenol	ND		0.33	0.036	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
2,4,6-Trichlorophenol	ND		0.33	0.050	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
1,1'-Biphenyl	ND		0.33	0.030	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Caprolactam	ND		1.7	0.25	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzaldehyde	ND		0.33	0.050	mg/Kg		11/15/11 05:58	11/17/11 16:02	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-20747/1-A

Matrix: Solid

Analysis Batch: 21248

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20747

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND		0.33	0.032	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzoic acid	ND		1.7	0.14	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
Benzidine	ND		6.7	1.4	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
1,4-Dioxane	ND		0.67	0.038	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.33	0.043	mg/Kg		11/15/11 05:58	11/17/11 16:02	1
o-Toluidine	ND		0.33	0.025	mg/Kg		11/15/11 05:58	11/17/11 16:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	84		25 - 104	11/15/11 05:58	11/17/11 16:02	1
2-Fluorobiphenyl	83		35 - 105	11/15/11 05:58	11/17/11 16:02	1
Terphenyl-d14	75		25 - 127	11/15/11 05:58	11/17/11 16:02	1
Phenol-d5	94		25 - 105	11/15/11 05:58	11/17/11 16:02	1
2-Fluorophenol	87		39 - 103	11/15/11 05:58	11/17/11 16:02	1
2,4,6-Tribromophenol	95		35 - 124	11/15/11 05:58	11/17/11 16:02	1

Lab Sample ID: LCS 180-20747/2-A

Matrix: Solid

Analysis Batch: 21248

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20747

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	6.67	6.09		mg/Kg		91	30 - 125
Acenaphthene	6.67	6.25		mg/Kg		94	47 - 104
Acetophenone	6.67	5.95		mg/Kg		89	30 - 150
Acenaphthylene	6.67	6.50		mg/Kg		97	49 - 114
Anthracene	6.67	6.05		mg/Kg		91	45 - 112
Benzo[a]anthracene	6.67	6.35		mg/Kg		95	47 - 110
Benzo[a]pyrene	6.67	6.68		mg/Kg		100	47 - 112
Benzo[b]fluoranthene	6.67	5.67		mg/Kg		85	41 - 107
Benzo[g,h,i]perylene	6.67	6.64		mg/Kg		100	38 - 126
Benzo[k]fluoranthene	6.67	5.84		mg/Kg		88	44 - 115
Bis(2-chloroethyl)ether	6.67	5.84		mg/Kg		88	38 - 99
Bis(2-chloroethoxy)methane	6.67	6.00		mg/Kg		90	44 - 101
2,2'-oxybis[1-chloropropane]	6.67	5.76		mg/Kg		86	36 - 101
Bis(2-ethylhexyl) phthalate	6.67	6.21		mg/Kg		93	40 - 122
4-Bromophenyl phenyl ether	6.67	6.14		mg/Kg		92	47 - 110
Butyl benzyl phthalate	6.67	6.64		mg/Kg		100	41 - 118
Carbazole	6.67	6.13		mg/Kg		92	45 - 114
4-Chloroaniline	6.67	6.34		mg/Kg		95	25 - 108
2-Chloronaphthalene	6.67	6.09		mg/Kg		91	46 - 101
4-Chlorophenyl phenyl ether	6.67	6.07		mg/Kg		91	47 - 109
Chrysene	6.67	6.32		mg/Kg		95	46 - 111
Dibenz(a,h)anthracene	6.67	6.71		mg/Kg		101	39 - 127
Di-n-butyl phthalate	6.67	6.30		mg/Kg		94	43 - 121
3,3'-Dichlorobenzidine	6.67	6.53		mg/Kg		98	19 - 122
Diethyl phthalate	6.67	6.25		mg/Kg		94	47 - 115
Dimethyl phthalate	6.67	6.25		mg/Kg		94	49 - 111
2,4-Dinitrotoluene	6.67	6.69		mg/Kg		100	45 - 124
2,6-Dinitrotoluene	6.67	7.09		mg/Kg		106	50 - 122
Di-n-octyl phthalate	6.67	6.51		mg/Kg		98	33 - 129

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-20747/2-A

Matrix: Solid

Analysis Batch: 21248

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20747

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	6.67	6.45		mg/Kg		97	40 - 120
Fluorene	6.67	6.31		mg/Kg		95	46 - 109
Hexachlorobenzene	6.67	6.05		mg/Kg		91	47 - 108
Hexachlorobutadiene	6.67	6.35		mg/Kg		95	43 - 107
Hexachlorocyclopentadiene	6.67	6.83		mg/Kg		102	23 - 129
Hexachloroethane	6.67	5.98		mg/Kg		90	37 - 97
Indeno[1,2,3-cd]pyrene	6.67	6.45		mg/Kg		97	41 - 125
Isophorone	6.67	6.27		mg/Kg		94	47 - 110
2-Methylnaphthalene	6.67	6.29		mg/Kg		94	45 - 100
Naphthalene	6.67	6.29		mg/Kg		94	43 - 100
2-Nitroaniline	6.67	6.56		mg/Kg		98	45 - 117
3-Nitroaniline	6.67	6.77		mg/Kg		102	34 - 122
4-Nitroaniline	6.67	6.37		mg/Kg		96	38 - 123
Nitrobenzene	6.67	6.10		mg/Kg		92	43 - 104
N-Nitrosodi-n-propylamine	6.67	5.81		mg/Kg		87	42 - 107
N-Nitrosodiphenylamine	6.67	6.34		mg/Kg		95	44 - 111
Phenanthrene	6.67	6.33		mg/Kg		95	43 - 108
Pyrene	6.67	6.21		mg/Kg		93	41 - 115
4-Chloro-3-methylphenol	6.67	6.41		mg/Kg		96	47 - 109
2-Chlorophenol	6.67	6.08		mg/Kg		91	40 - 101
Aniline	6.67	6.16		mg/Kg		92	21 - 94
2-Methylphenol	6.67	6.04		mg/Kg		91	40 - 104
2,4-Dichlorophenol	6.67	6.41		mg/Kg		96	47 - 105
2,4-Dimethylphenol	6.67	6.34		mg/Kg		95	44 - 105
2,4-Dinitrophenol	6.67	7.47		mg/Kg		112	10 - 146
4,6-Dinitro-2-methylphenol	6.67	6.72		mg/Kg		101	24 - 134
2-Nitrophenol	6.67	6.66		mg/Kg		100	46 - 106
Benzyl alcohol	6.67	6.29		mg/Kg		94	39 - 108
4-Nitrophenol	6.67	7.34		mg/Kg		110	36 - 127
Pentachlorophenol	6.67	6.38		mg/Kg		96	17 - 122
Phenol	6.67	5.93		mg/Kg		89	41 - 102
2,4,5-Trichlorophenol	6.67	6.50		mg/Kg		97	48 - 108
2,4,6-Trichlorophenol	6.67	6.59		mg/Kg		99	50 - 106
1,1'-Biphenyl	6.67	5.99		mg/Kg		90	30 - 150
Caprolactam	6.67	6.78		mg/Kg		102	30 - 150
Benzaldehyde	6.67	3.43		mg/Kg		51	30 - 150
Atrazine	6.67	10.8	*	mg/Kg		162	30 - 150
Benzoic acid	6.67	7.12		mg/Kg		107	11 - 133
Benzidine	6.67	4.38	J	mg/Kg		66	30 - 120
1,4-Dioxane	6.67	5.67		mg/Kg		85	41 - 102
1,2-Diphenylhydrazine(as Azobenzene)	6.67	5.68		mg/Kg		85	43 - 113

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	93		25 - 104
2-Fluorobiphenyl	94		35 - 105
Terphenyl-d14	95		25 - 127
Phenol-d5	97		25 - 105
2-Fluorophenol	98		39 - 103

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-20747/2-A

Matrix: Solid

Analysis Batch: 21248

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20747

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	106		35 - 124

Lab Sample ID: MB 180-21153/1-A

Matrix: Solid

Analysis Batch: 21730

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		0.33	0.025	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Acenaphthene	ND		0.067	0.0064	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Acetophenone	ND		0.33	0.027	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Acenaphthylene	ND		0.067	0.0076	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Anthracene	ND		0.067	0.0065	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzo[a]anthracene	ND		0.067	0.0084	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzo[a]pyrene	ND		0.067	0.0067	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzo[b]fluoranthene	ND		0.067	0.010	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzo[g,h,i]perylene	ND		0.067	0.0066	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzo[k]fluoranthene	ND		0.067	0.013	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Bis(2-chloroethyl)ether	ND		0.067	0.0090	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Bis(2-chloroethoxy)methane	ND		0.33	0.022	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2,2'-oxybis[1-chloropropane]	ND		0.067	0.0072	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Bis(2-ethylhexyl) phthalate	ND		0.67	0.054	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
4-Bromophenyl phenyl ether	ND		0.33	0.029	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Butyl benzyl phthalate	ND		0.33	0.046	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Carbazole	ND		0.067	0.0061	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
4-Chloroaniline	ND		0.33	0.027	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2-Chloronaphthalene	ND		0.067	0.0070	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
4-Chlorophenyl phenyl ether	ND		0.33	0.037	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Chrysene	ND		0.067	0.0079	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Dibenz(a,h)anthracene	ND		0.067	0.0074	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Di-n-butyl phthalate	ND		0.33	0.042	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
3,3'-Dichlorobenzidine	ND		0.33	0.035	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Diethyl phthalate	ND		0.33	0.036	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Dimethyl phthalate	ND		0.33	0.036	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2,4-Dinitrotoluene	ND		0.33	0.027	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2,6-Dinitrotoluene	ND		0.33	0.034	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Di-n-octyl phthalate	ND		0.33	0.035	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Fluoranthene	ND		0.067	0.0071	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Fluorene	ND		0.067	0.0088	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Hexachlorobenzene	ND		0.067	0.0071	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
3,3'-Dimethylbenzidine	ND		1.7	0.018	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Hexachlorobutadiene	ND		0.067	0.0075	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Hexachlorocyclopentadiene	ND		0.33	0.036	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Hexachloroethane	ND		0.33	0.024	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Indeno[1,2,3-cd]pyrene	ND		0.067	0.0069	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Isophorone	ND		0.33	0.025	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2-Methylnaphthalene	ND		0.067	0.0060	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Naphthalene	ND		0.067	0.0057	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2-Nitroaniline	ND		1.7	0.15	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
3-Nitroaniline	ND		1.7	0.14	mg/Kg		11/18/11 04:12	11/23/11 13:06	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-21153/1-A

Matrix: Solid

Analysis Batch: 21730

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	ND		1.7	0.14	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Nitrobenzene	ND		0.67	0.028	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
N-Nitrosodi-n-propylamine	ND		0.067	0.0078	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
N-Nitrosodiphenylamine	ND		0.33	0.031	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Phenanthrene	ND		0.067	0.011	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Pyrene	ND		0.067	0.0067	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
4-Chloro-3-methylphenol	ND		0.33	0.031	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2-Chlorophenol	ND		0.33	0.027	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Aniline	ND		0.33	0.026	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2-Methylphenol	ND		0.33	0.023	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Methylphenol, 3 & 4	ND		0.33	0.033	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2,4-Dichlorophenol	ND		0.067	0.0067	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2,4-Dimethylphenol	ND		0.33	0.052	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2,4-Dinitrophenol	ND		1.7	0.40	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
4,6-Dinitro-2-methylphenol	ND		1.7	0.13	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2-Nitrophenol	ND		0.33	0.037	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzyl alcohol	ND		0.33	0.040	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
4-Nitrophenol	ND		1.7	0.12	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Pentachlorophenol	ND		0.33	0.030	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Phenol	ND		0.067	0.0079	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2,4,5-Trichlorophenol	ND		0.33	0.036	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
2,4,6-Trichlorophenol	ND		0.33	0.050	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
1,1'-Biphenyl	ND		0.33	0.030	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Caprolactam	ND		1.7	0.25	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzaldehyde	ND		0.33	0.050	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Atrazine	ND		0.33	0.032	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzoic acid	ND		1.7	0.14	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
Benzidine	ND		6.7	1.4	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
1,4-Dioxane	ND		0.67	0.038	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.33	0.043	mg/Kg		11/18/11 04:12	11/23/11 13:06	1
o-Toluidine	ND		0.33	0.025	mg/Kg		11/18/11 04:12	11/23/11 13:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	80		25 - 104	11/18/11 04:12	11/23/11 13:06	1
2-Fluorobiphenyl	79		35 - 105	11/18/11 04:12	11/23/11 13:06	1
Terphenyl-d14	69		25 - 127	11/18/11 04:12	11/23/11 13:06	1
Phenol-d5	92		25 - 105	11/18/11 04:12	11/23/11 13:06	1
2-Fluorophenol	83		39 - 103	11/18/11 04:12	11/23/11 13:06	1
2,4,6-Tribromophenol	73		35 - 124	11/18/11 04:12	11/23/11 13:06	1

Lab Sample ID: LCS 180-21153/2-A

Matrix: Solid

Analysis Batch: 21730

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	6.67	5.49		mg/Kg		82	30 - 125
Acenaphthene	6.67	5.95		mg/Kg		89	47 - 104
Acetophenone	6.67	5.97		mg/Kg		90	30 - 150
Acenaphthylene	6.67	6.16		mg/Kg		92	49 - 114

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-21153/2-A

Matrix: Solid

Analysis Batch: 21730

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Anthracene	6.67	5.84		mg/Kg		88	45 - 112
Benzo[a]anthracene	6.67	6.40		mg/Kg		96	47 - 110
Benzo[a]pyrene	6.67	6.53		mg/Kg		98	47 - 112
Benzo[b]fluoranthene	6.67	6.70		mg/Kg		101	41 - 107
Benzo[g,h,i]perylene	6.67	6.08		mg/Kg		91	38 - 126
Benzo[k]fluoranthene	6.67	5.71		mg/Kg		86	44 - 115
Bis(2-chloroethyl)ether	6.67	5.67		mg/Kg		85	38 - 99
Bis(2-chloroethoxy)methane	6.67	6.00		mg/Kg		90	44 - 101
2,2'-oxybis[1-chloropropane]	6.67	5.61		mg/Kg		84	36 - 101
Bis(2-ethylhexyl) phthalate	6.67	6.54		mg/Kg		98	40 - 122
4-Bromophenyl phenyl ether	6.67	6.02		mg/Kg		90	47 - 110
Butyl benzyl phthalate	6.67	7.07		mg/Kg		106	41 - 118
Carbazole	6.67	6.06		mg/Kg		91	45 - 114
4-Chloroaniline	6.67	5.95		mg/Kg		89	25 - 108
2-Chloronaphthalene	6.67	5.61		mg/Kg		84	46 - 101
4-Chlorophenyl phenyl ether	6.67	5.93		mg/Kg		89	47 - 109
Chrysene	6.67	6.20		mg/Kg		93	46 - 111
Dibenz(a,h)anthracene	6.67	6.20		mg/Kg		93	39 - 127
Di-n-butyl phthalate	6.67	6.33		mg/Kg		95	43 - 121
3,3'-Dichlorobenzidine	6.67	6.44		mg/Kg		97	19 - 122
Diethyl phthalate	6.67	6.37		mg/Kg		96	47 - 115
Dimethyl phthalate	6.67	6.16		mg/Kg		92	49 - 111
2,4-Dinitrotoluene	6.67	6.25		mg/Kg		94	45 - 124
2,6-Dinitrotoluene	6.67	6.87		mg/Kg		103	50 - 122
Di-n-octyl phthalate	6.67	7.11		mg/Kg		107	33 - 129
Fluoranthene	6.67	6.38		mg/Kg		96	40 - 120
Fluorene	6.67	5.92		mg/Kg		89	46 - 109
Hexachlorobenzene	6.67	6.12		mg/Kg		92	47 - 108
Hexachlorobutadiene	6.67	6.06		mg/Kg		91	43 - 107
Hexachlorocyclopentadiene	6.67	6.13		mg/Kg		92	23 - 129
Hexachloroethane	6.67	5.85		mg/Kg		88	37 - 97
Indeno[1,2,3-cd]pyrene	6.67	5.95		mg/Kg		89	41 - 125
Isophorone	6.67	6.02		mg/Kg		90	47 - 110
2-Methylnaphthalene	6.67	6.13		mg/Kg		92	45 - 100
Naphthalene	6.67	5.94		mg/Kg		89	43 - 100
2-Nitroaniline	6.67	6.32		mg/Kg		95	45 - 117
3-Nitroaniline	6.67	6.63		mg/Kg		100	34 - 122
4-Nitroaniline	6.67	6.35		mg/Kg		95	38 - 123
Nitrobenzene	6.67	5.79		mg/Kg		87	43 - 104
N-Nitrosodi-n-propylamine	6.67	6.07		mg/Kg		91	42 - 107
N-Nitrosodiphenylamine	6.67	6.13		mg/Kg		92	44 - 111
Phenanthrene	6.67	6.12		mg/Kg		92	43 - 108
Pyrene	6.67	6.63		mg/Kg		99	41 - 115
4-Chloro-3-methylphenol	6.67	6.42		mg/Kg		96	47 - 109
2-Chlorophenol	6.67	5.97		mg/Kg		89	40 - 101
Aniline	6.67	5.91		mg/Kg		89	21 - 94
2-Methylphenol	6.67	6.04		mg/Kg		91	40 - 104
2,4-Dichlorophenol	6.67	6.31		mg/Kg		95	47 - 105
2,4-Dimethylphenol	6.67	6.04		mg/Kg		91	44 - 105
2,4-Dinitrophenol	6.67	7.04		mg/Kg		106	10 - 146

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-21153/2-A

Matrix: Solid

Analysis Batch: 21730

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	6.67	6.62		mg/Kg		99	24 - 134
2-Nitrophenol	6.67	6.34		mg/Kg		95	46 - 106
Benzyl alcohol	6.67	6.15		mg/Kg		92	39 - 108
4-Nitrophenol	6.67	6.57		mg/Kg		99	36 - 127
Pentachlorophenol	6.67	6.36		mg/Kg		95	17 - 122
Phenol	6.67	5.89		mg/Kg		88	41 - 102
2,4,5-Trichlorophenol	6.67	6.01		mg/Kg		90	48 - 108
2,4,6-Trichlorophenol	6.67	6.55		mg/Kg		98	50 - 106
1,1'-Biphenyl	6.67	5.53		mg/Kg		83	30 - 150
Caprolactam	6.67	6.88		mg/Kg		103	30 - 150
Benzaldehyde	6.67	3.33		mg/Kg		50	30 - 150
Atrazine	6.67	10.4	*	mg/Kg		155	30 - 150
Benzoic acid	6.67	6.67		mg/Kg		100	11 - 133
Benzidine	6.67	5.71	J	mg/Kg		86	30 - 120
1,4-Dioxane	6.67	5.51		mg/Kg		83	41 - 102
1,2-Diphenylhydrazine(as Azobenzene)	6.67	5.44		mg/Kg		82	43 - 113

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	85		25 - 104
2-Fluorobiphenyl	87		35 - 105
Terphenyl-d14	100		25 - 127
Phenol-d5	94		25 - 105
2-Fluorophenol	94		39 - 103
2,4,6-Tribromophenol	97		35 - 124

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: LCS 180-20447/2-A

Matrix: Water

Analysis Batch: 20744

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	20.0	13.5		ug/L		67	35 - 99
Acenaphthylene	20.0	13.7		ug/L		68	37 - 107
Acetophenone	20.0	12.8		ug/L		64	30 - 150
Anthracene	20.0	13.8		ug/L		69	35 - 105
Atrazine	20.0	21.6		ug/L		108	30 - 150
Benzaldehyde	20.0	12.8		ug/L		64	30 - 150
Benzo[a]anthracene	20.0	14.2		ug/L		71	38 - 101
Benzo[b]fluoranthene	20.0	12.6		ug/L		63	29 - 98
Benzo[k]fluoranthene	20.0	13.4		ug/L		67	28 - 107
Benzo[g,h,i]perylene	20.0	13.0		ug/L		65	20 - 115
Benzo[a]pyrene	20.0	13.8		ug/L		69	26 - 108
Bis(2-chloroethoxy)methane	20.0	13.3		ug/L		67	33 - 98
Bis(2-chloroethyl)ether	20.0	12.1		ug/L		61	33 - 95
Bis(2-ethylhexyl) phthalate	20.0	14.5		ug/L		72	20 - 116
Butyl benzyl phthalate	20.0	14.8		ug/L		74	36 - 108
1,1'-Biphenyl	20.0	13.0		ug/L		65	30 - 150

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 180-20447/2-A

Matrix: Water

Analysis Batch: 20744

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Caprolactam	20.0	14.8		ug/L		74	30 - 150
Carbazole	20.0	12.5		ug/L		62	29 - 112
Chrysene	20.0	13.2		ug/L		66	37 - 99
2-Chloronaphthalene	20.0	12.8		ug/L		64	34 - 96
2-Chlorophenol	20.0	12.8		ug/L		64	31 - 99
2,4-Dichlorophenol	20.0	13.7		ug/L		69	34 - 104
2,4-Dimethylphenol	20.0	13.4		ug/L		67	33 - 97
2,4-Dinitrophenol	20.0	10.9		ug/L		54	10 - 130
2,4-Dinitrotoluene	20.0	13.5		ug/L		68	37 - 115
2,6-Dinitrotoluene	20.0	13.8		ug/L		69	39 - 113
2-Methylnaphthalene	20.0	12.8		ug/L		64	34 - 98
2-Methylphenol	20.0	13.0		ug/L		65	33 - 98
2-Nitroaniline	20.0	14.6		ug/L		73	29 - 112
2-Nitrophenol	20.0	13.2		ug/L		66	34 - 107
2,2'-oxybis[1-chloropropane]	20.0	12.4		ug/L		62	30 - 99
2,4,5-Trichlorophenol	20.0	13.9		ug/L		69	34 - 104
2,4,6-Trichlorophenol	20.0	13.8		ug/L		69	36 - 103
4-Nitroaniline	20.0	12.9		ug/L		64	20 - 124
4-Nitrophenol	20.0	11.8		ug/L		59	29 - 115
4-Chlorophenyl phenyl ether	20.0	13.3		ug/L		67	34 - 103
Methylphenol, 3 & 4	40.0	28.0		ug/L		70	32 - 100
4,6-Dinitro-2-methylphenol	20.0	14.0		ug/L		70	24 - 124
4-Chloroaniline	20.0	13.4		ug/L		67	10 - 99
4-Chloro-3-methylphenol	20.0	14.2		ug/L		71	35 - 104
4-Bromophenyl phenyl ether	20.0	14.3		ug/L		71	37 - 104
Dibenz(a,h)anthracene	20.0	13.5		ug/L		67	19 - 118
Dibenzofuran	20.0	12.8		ug/L		64	34 - 101
Di-n-butyl phthalate	20.0	13.9		ug/L		69	37 - 111
Diethyl phthalate	20.0	13.1		ug/L		65	36 - 109
Dimethyl phthalate	20.0	13.3		ug/L		66	37 - 106
Di-n-octyl phthalate	20.0	16.2		ug/L		81	11 - 127
3,3'-Dichlorobenzidine	20.0	13.7		ug/L		69	10 - 89
3-Nitroaniline	20.0	13.5		ug/L		67	11 - 104
Fluoranthene	20.0	13.1		ug/L		65	32 - 112
Fluorene	20.0	13.3		ug/L		67	34 - 104
Hexachlorobenzene	20.0	13.5		ug/L		67	35 - 102
Hexachlorobutadiene	20.0	12.0		ug/L		60	35 - 100
Hexachlorocyclopentadiene	20.0	13.1		ug/L		65	36 - 115
Hexachloroethane	20.0	10.9		ug/L		55	32 - 94
Indeno[1,2,3-cd]pyrene	20.0	12.7		ug/L		63	22 - 115
Isophorone	20.0	13.6		ug/L		68	38 - 102
Naphthalene	20.0	12.2		ug/L		61	35 - 97
Nitrobenzene	20.0	12.4		ug/L		62	37 - 100
N-Nitrosodiphenylamine	20.0	14.2		ug/L		71	32 - 102
N-Nitrosodi-n-propylamine	20.0	12.9		ug/L		64	34 - 101
Pyrene	20.0	15.7		ug/L		79	35 - 106
Phenol	20.0	12.6		ug/L		63	32 - 95
Phenanthrene	20.0	13.2		ug/L		66	32 - 104
Pentachlorophenol	20.0	10.7		ug/L		54	15 - 111

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 180-20447/2-A

Matrix: Water

Analysis Batch: 20744

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20447

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	77		16 - 122
2-Fluorobiphenyl	64		19 - 107
2-Fluorophenol	71		10 - 111
Nitrobenzene-d5	62		23 - 112
Phenol-d5	70		15 - 112
Terphenyl-d14	78		10 - 132

Lab Sample ID: LCSD 180-20447/3-A

Matrix: Water

Analysis Batch: 20744

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20447

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	20.0	12.6		ug/L		63	35 - 99	6	41
Acenaphthylene	20.0	12.8		ug/L		64	37 - 107	7	40
Acetophenone	20.0	12.0		ug/L		60	30 - 150	7	35
Anthracene	20.0	13.1		ug/L		65	35 - 105	5	37
Atrazine	20.0	21.2		ug/L		106	30 - 150	2	35
Benzaldehyde	20.0	4.56 *		ug/L		23	30 - 150	95	35
Benzo[a]anthracene	20.0	13.8		ug/L		69	38 - 101	3	36
Benzo[b]fluoranthene	20.0	13.0		ug/L		65	29 - 98	4	46
Benzo[k]fluoranthene	20.0	11.9		ug/L		60	28 - 107	12	31
Benzo[g,h,i]perylene	20.0	12.2		ug/L		61	20 - 115	6	44
Benzo[a]pyrene	20.0	12.8		ug/L		64	26 - 108	7	40
Bis(2-chloroethoxy)methane	20.0	12.5		ug/L		62	33 - 98	7	46
Bis(2-chloroethyl)ether	20.0	11.5		ug/L		57	33 - 95	6	38
Bis(2-ethylhexyl) phthalate	20.0	13.6		ug/L		68	20 - 116	6	40
Butyl benzyl phthalate	20.0	13.7		ug/L		68	36 - 108	8	40
1,1'-Biphenyl	20.0	12.0		ug/L		60	30 - 150	8	35
Caprolactam	20.0	12.3		ug/L		62	30 - 150	18	35
Carbazole	20.0	12.0		ug/L		60	29 - 112	4	35
Chrysene	20.0	12.1		ug/L		61	37 - 99	8	42
2-Chloronaphthalene	20.0	11.8		ug/L		59	34 - 96	8	39
2-Chlorophenol	20.0	11.8		ug/L		59	31 - 99	8	39
2,4-Dichlorophenol	20.0	12.5		ug/L		63	34 - 104	9	41
2,4-Dimethylphenol	20.0	11.9		ug/L		60	33 - 97	11	40
2,4-Dinitrophenol	20.0	10.8		ug/L		54	10 - 130	1	53
2,4-Dinitrotoluene	20.0	12.2		ug/L		61	37 - 115	10	39
2,6-Dinitrotoluene	20.0	12.3		ug/L		61	39 - 113	12	40
2-Methylnaphthalene	20.0	11.8		ug/L		59	34 - 98	8	42
2-Methylphenol	20.0	12.3		ug/L		62	33 - 98	5	38
2-Nitroaniline	20.0	13.6		ug/L		68	29 - 112	7	65
2-Nitrophenol	20.0	12.4		ug/L		62	34 - 107	7	41
2,2'-oxybis[1-chloropropane]	20.0	11.5		ug/L		58	30 - 99	8	42
2,4,5-Trichlorophenol	20.0	12.4		ug/L		62	34 - 104	11	39
2,4,6-Trichlorophenol	20.0	12.8		ug/L		64	36 - 103	7	39
4-Nitroaniline	20.0	12.3		ug/L		61	20 - 124	5	45
4-Nitrophenol	20.0	10.5		ug/L		53	29 - 115	12	42
4-Chlorophenyl phenyl ether	20.0	12.0		ug/L		60	34 - 103	10	38
Methylphenol, 3 & 4	40.0	26.4		ug/L		66	32 - 100	6	41

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 180-20447/3-A

Matrix: Water

Analysis Batch: 20744

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20447

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,6-Dinitro-2-methylphenol	20.0	13.0		ug/L		65	24 - 124	7	41
4-Chloroaniline	20.0	12.2		ug/L		61	10 - 99	10	39
4-Chloro-3-methylphenol	20.0	13.6		ug/L		68	35 - 104	4	42
4-Bromophenyl phenyl ether	20.0	13.1		ug/L		66	37 - 104	9	40
Dibenz(a,h)anthracene	20.0	12.7		ug/L		63	19 - 118	6	44
Dibenzofuran	20.0	11.6		ug/L		58	34 - 101	10	39
Di-n-butyl phthalate	20.0	13.6		ug/L		68	37 - 111	2	38
Diethyl phthalate	20.0	11.8		ug/L		59	36 - 109	10	39
Dimethyl phthalate	20.0	11.7		ug/L		59	37 - 106	13	42
Di-n-octyl phthalate	20.0	15.4		ug/L		77	11 - 127	5	44
3,3'-Dichlorobenzidine	20.0	12.3		ug/L		62	10 - 89	11	56
3-Nitroaniline	20.0	11.6		ug/L		58	11 - 104	15	48
Fluoranthene	20.0	12.9		ug/L		64	32 - 112	2	39
Fluorene	20.0	12.0		ug/L		60	34 - 104	11	40
Hexachlorobenzene	20.0	13.1		ug/L		65	35 - 102	3	35
Hexachlorobutadiene	20.0	11.1		ug/L		56	35 - 100	8	41
Hexachlorocyclopentadiene	20.0	12.3		ug/L		62	36 - 115	6	47
Hexachloroethane	20.0	10.3		ug/L		51	32 - 94	6	39
Indeno[1,2,3-cd]pyrene	20.0	12.1		ug/L		61	22 - 115	5	54
Isophorone	20.0	12.7		ug/L		64	38 - 102	7	43
Naphthalene	20.0	11.6		ug/L		58	35 - 97	5	43
Nitrobenzene	20.0	12.0		ug/L		60	37 - 100	3	42
N-Nitrosodiphenylamine	20.0	13.4		ug/L		67	32 - 102	6	36
N-Nitrosodi-n-propylamine	20.0	12.2		ug/L		61	34 - 101	6	43
Pyrene	20.0	14.3		ug/L		71	35 - 106	9	42
Phenol	20.0	11.9		ug/L		59	32 - 95	6	39
Phenanthrene	20.0	13.4		ug/L		67	32 - 104	2	36
Pentachlorophenol	20.0	10.2		ug/L		51	15 - 111	5	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	72		16 - 122
2-Fluorobiphenyl	61		19 - 107
2-Fluorophenol	66		10 - 111
Nitrobenzene-d5	59		23 - 112
Phenol-d5	66		15 - 112
Terphenyl-d14	73		10 - 132

Lab Sample ID: MB 180-20631/1-A

Matrix: Water

Analysis Batch: 20906

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.014	ug/L		11/14/11 08:36	11/15/11 13:09	1
Acenaphthylene	ND		0.20	0.015	ug/L		11/14/11 08:36	11/15/11 13:09	1
Acetophenone	ND		1.0	0.080	ug/L		11/14/11 08:36	11/15/11 13:09	1
Anthracene	ND		0.20	0.15	ug/L		11/14/11 08:36	11/15/11 13:09	1
Atrazine	ND		1.0	0.089	ug/L		11/14/11 08:36	11/15/11 13:09	1
Benzaldehyde	ND		1.0	0.15	ug/L		11/14/11 08:36	11/15/11 13:09	1
Benzo[a]anthracene	ND		0.20	0.015	ug/L		11/14/11 08:36	11/15/11 13:09	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 180-20631/1-A

Matrix: Water

Analysis Batch: 20906

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		0.20	0.016	ug/L		11/14/11 08:36	11/15/11 13:09	1
Benzo[k]fluoranthene	ND		0.20	0.055	ug/L		11/14/11 08:36	11/15/11 13:09	1
Benzo[g,h,i]perylene	ND		0.20	0.015	ug/L		11/14/11 08:36	11/15/11 13:09	1
Benzo[a]pyrene	ND		0.20	0.013	ug/L		11/14/11 08:36	11/15/11 13:09	1
Bis(2-chloroethoxy)methane	ND		1.0	0.058	ug/L		11/14/11 08:36	11/15/11 13:09	1
Bis(2-chloroethyl)ether	ND		0.20	0.025	ug/L		11/14/11 08:36	11/15/11 13:09	1
Bis(2-ethylhexyl) phthalate	ND		2.0	1.3	ug/L		11/14/11 08:36	11/15/11 13:09	1
Butyl benzyl phthalate	ND		1.0	0.14	ug/L		11/14/11 08:36	11/15/11 13:09	1
1,1'-Biphenyl	ND		1.0	0.042	ug/L		11/14/11 08:36	11/15/11 13:09	1
Caprolactam	ND		5.0	1.2	ug/L		11/14/11 08:36	11/15/11 13:09	1
Carbazole	ND		0.20	0.016	ug/L		11/14/11 08:36	11/15/11 13:09	1
Chrysene	ND		0.20	0.014	ug/L		11/14/11 08:36	11/15/11 13:09	1
2-Chloronaphthalene	ND		0.20	0.015	ug/L		11/14/11 08:36	11/15/11 13:09	1
2-Chlorophenol	ND		1.0	0.17	ug/L		11/14/11 08:36	11/15/11 13:09	1
2,4-Dichlorophenol	ND		0.20	0.033	ug/L		11/14/11 08:36	11/15/11 13:09	1
2,4-Dimethylphenol	ND		1.0	0.085	ug/L		11/14/11 08:36	11/15/11 13:09	1
2,4-Dinitrophenol	ND		5.0	0.61	ug/L		11/14/11 08:36	11/15/11 13:09	1
2,4-Dinitrotoluene	ND		1.0	0.054	ug/L		11/14/11 08:36	11/15/11 13:09	1
2,6-Dinitrotoluene	ND		1.0	0.080	ug/L		11/14/11 08:36	11/15/11 13:09	1
2-Methylnaphthalene	ND		0.20	0.012	ug/L		11/14/11 08:36	11/15/11 13:09	1
2-Methylphenol	ND		1.0	0.086	ug/L		11/14/11 08:36	11/15/11 13:09	1
2-Nitroaniline	ND		5.0	0.35	ug/L		11/14/11 08:36	11/15/11 13:09	1
2-Nitrophenol	ND		1.0	0.17	ug/L		11/14/11 08:36	11/15/11 13:09	1
2,2'-oxybis[1-chloropropane]	ND		0.20	0.020	ug/L		11/14/11 08:36	11/15/11 13:09	1
2,4,5-Trichlorophenol	ND		1.0	0.15	ug/L		11/14/11 08:36	11/15/11 13:09	1
2,4,6-Trichlorophenol	ND		1.0	0.17	ug/L		11/14/11 08:36	11/15/11 13:09	1
4-Nitroaniline	ND		5.0	0.17	ug/L		11/14/11 08:36	11/15/11 13:09	1
4-Nitrophenol	ND		5.0	0.65	ug/L		11/14/11 08:36	11/15/11 13:09	1
4-Chlorophenyl phenyl ether	ND		1.0	0.050	ug/L		11/14/11 08:36	11/15/11 13:09	1
Methylphenol, 3 & 4	ND		1.0	0.090	ug/L		11/14/11 08:36	11/15/11 13:09	1
4,6-Dinitro-2-methylphenol	ND		5.0	0.22	ug/L		11/14/11 08:36	11/15/11 13:09	1
4-Chloroaniline	ND		1.0	0.089	ug/L		11/14/11 08:36	11/15/11 13:09	1
4-Chloro-3-methylphenol	ND		1.0	0.075	ug/L		11/14/11 08:36	11/15/11 13:09	1
4-Bromophenyl phenyl ether	ND		1.0	0.064	ug/L		11/14/11 08:36	11/15/11 13:09	1
Dibenz(a,h)anthracene	ND		0.20	0.016	ug/L		11/14/11 08:36	11/15/11 13:09	1
Dibenzofuran	ND		1.0	0.062	ug/L		11/14/11 08:36	11/15/11 13:09	1
Di-n-butyl phthalate	ND		1.0	0.12	ug/L		11/14/11 08:36	11/15/11 13:09	1
Diethyl phthalate	ND		1.0	0.15	ug/L		11/14/11 08:36	11/15/11 13:09	1
Dimethyl phthalate	ND		1.0	0.077	ug/L		11/14/11 08:36	11/15/11 13:09	1
Di-n-octyl phthalate	ND		1.0	0.21	ug/L		11/14/11 08:36	11/15/11 13:09	1
3,3'-Dichlorobenzidine	ND		1.0	0.11	ug/L		11/14/11 08:36	11/15/11 13:09	1
3-Nitroaniline	ND		5.0	0.32	ug/L		11/14/11 08:36	11/15/11 13:09	1
Fluoranthene	ND		0.20	0.016	ug/L		11/14/11 08:36	11/15/11 13:09	1
Fluorene	ND		0.20	0.022	ug/L		11/14/11 08:36	11/15/11 13:09	1
Hexachlorobenzene	ND		0.20	0.018	ug/L		11/14/11 08:36	11/15/11 13:09	1
Hexachlorobutadiene	ND		0.20	0.017	ug/L		11/14/11 08:36	11/15/11 13:09	1
Hexachlorocyclopentadiene	ND		1.0	0.052	ug/L		11/14/11 08:36	11/15/11 13:09	1
Hexachloroethane	ND		1.0	0.063	ug/L		11/14/11 08:36	11/15/11 13:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.020	ug/L		11/14/11 08:36	11/15/11 13:09	1
Isophorone	ND		1.0	0.064	ug/L		11/14/11 08:36	11/15/11 13:09	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 180-20631/1-A

Matrix: Water

Analysis Batch: 20906

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.20	0.014	ug/L		11/14/11 08:36	11/15/11 13:09	1
Nitrobenzene	ND		2.0	0.084	ug/L		11/14/11 08:36	11/15/11 13:09	1
N-Nitrosodiphenylamine	ND		1.0	0.085	ug/L		11/14/11 08:36	11/15/11 13:09	1
N-Nitrosodi-n-propylamine	ND		0.20	0.031	ug/L		11/14/11 08:36	11/15/11 13:09	1
Pyrene	ND		0.20	0.016	ug/L		11/14/11 08:36	11/15/11 13:09	1
Phenol	ND		0.20	0.058	ug/L		11/14/11 08:36	11/15/11 13:09	1
Phenanthrene	ND		0.20	0.043	ug/L		11/14/11 08:36	11/15/11 13:09	1
Pentachlorophenol	ND		1.0	0.066	ug/L		11/14/11 08:36	11/15/11 13:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		16 - 122	11/14/11 08:36	11/15/11 13:09	1
2-Fluorobiphenyl	73		19 - 107	11/14/11 08:36	11/15/11 13:09	1
2-Fluorophenol	78		10 - 111	11/14/11 08:36	11/15/11 13:09	1
Nitrobenzene-d5	69		23 - 112	11/14/11 08:36	11/15/11 13:09	1
Phenol-d5	80		15 - 112	11/14/11 08:36	11/15/11 13:09	1
Terphenyl-d14	84		10 - 132	11/14/11 08:36	11/15/11 13:09	1

Lab Sample ID: LCS 180-20631/2-A

Matrix: Water

Analysis Batch: 20906

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20631

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	20.0	14.6		ug/L		73	35 - 99
Acenaphthylene	20.0	16.0		ug/L		80	37 - 107
Acetophenone	20.0	14.5		ug/L		73	30 - 150
Anthracene	20.0	14.3		ug/L		71	35 - 105
Atrazine	20.0	25.5		ug/L		128	30 - 150
Benzaldehyde	20.0	6.06		ug/L		30	30 - 150
Benzo[a]anthracene	20.0	14.5		ug/L		72	38 - 101
Benzo[b]fluoranthene	20.0	13.9		ug/L		69	29 - 98
Benzo[k]fluoranthene	20.0	14.1		ug/L		70	28 - 107
Benzo[g,h,i]perylene	20.0	14.2		ug/L		71	20 - 115
Benzo[a]pyrene	20.0	14.5		ug/L		73	26 - 108
Bis(2-chloroethoxy)methane	20.0	14.5		ug/L		73	33 - 98
Bis(2-chloroethyl)ether	20.0	14.3		ug/L		71	33 - 95
Bis(2-ethylhexyl) phthalate	20.0	14.6		ug/L		73	20 - 116
Butyl benzyl phthalate	20.0	14.7		ug/L		74	36 - 108
1,1'-Biphenyl	20.0	15.0		ug/L		75	30 - 150
Caprolactam	20.0	14.2		ug/L		71	30 - 150
Carbazole	20.0	13.7		ug/L		68	29 - 112
Chrysene	20.0	14.8		ug/L		74	37 - 99
2-Chloronaphthalene	20.0	15.1		ug/L		76	34 - 96
2-Chlorophenol	20.0	14.1		ug/L		70	31 - 99
2,4-Dichlorophenol	20.0	14.9		ug/L		75	34 - 104
2,4-Dimethylphenol	20.0	14.7		ug/L		73	33 - 97
2,4-Dinitrophenol	20.0	12.3		ug/L		61	10 - 130
2,4-Dinitrotoluene	20.0	13.9		ug/L		69	37 - 115
2,6-Dinitrotoluene	20.0	14.4		ug/L		72	39 - 113
2-Methylnaphthalene	20.0	14.3		ug/L		72	34 - 98

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 180-20631/2-A

Matrix: Water

Analysis Batch: 20906

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20631

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylphenol	20.0	14.6		ug/L		73	33 - 98
2-Nitroaniline	20.0	14.8		ug/L		74	29 - 112
2-Nitrophenol	20.0	15.1		ug/L		76	34 - 107
2,2'-oxybis[1-chloropropane]	20.0	13.9		ug/L		70	30 - 99
2,4,5-Trichlorophenol	20.0	15.2		ug/L		76	34 - 104
2,4,6-Trichlorophenol	20.0	16.2		ug/L		81	36 - 103
4-Nitroaniline	20.0	13.6		ug/L		68	20 - 124
4-Nitrophenol	20.0	12.6		ug/L		63	29 - 115
4-Chlorophenyl phenyl ether	20.0	14.5		ug/L		73	34 - 103
Methylphenol, 3 & 4	40.0	29.8		ug/L		75	32 - 100
4,6-Dinitro-2-methylphenol	20.0	14.9		ug/L		74	24 - 124
4-Chloroaniline	20.0	14.8		ug/L		74	10 - 99
4-Chloro-3-methylphenol	20.0	14.9		ug/L		74	35 - 104
4-Bromophenyl phenyl ether	20.0	15.3		ug/L		77	37 - 104
Dibenz(a,h)anthracene	20.0	14.8		ug/L		74	19 - 118
Dibenzofuran	20.0	13.8		ug/L		69	34 - 101
Di-n-butyl phthalate	20.0	14.2		ug/L		71	37 - 111
Diethyl phthalate	20.0	13.6		ug/L		68	36 - 109
Dimethyl phthalate	20.0	13.9		ug/L		69	37 - 106
Di-n-octyl phthalate	20.0	16.5		ug/L		82	11 - 127
3,3'-Dichlorobenzidine	20.0	13.6		ug/L		68	10 - 89
3-Nitroaniline	20.0	13.6		ug/L		68	11 - 104
Fluoranthene	20.0	13.9		ug/L		69	32 - 112
Fluorene	20.0	14.3		ug/L		71	34 - 104
Hexachlorobenzene	20.0	14.8		ug/L		74	35 - 102
Hexachlorobutadiene	20.0	14.4		ug/L		72	35 - 100
Hexachlorocyclopentadiene	20.0	16.7		ug/L		84	36 - 115
Hexachloroethane	20.0	13.9		ug/L		69	32 - 94
Indeno[1,2,3-cd]pyrene	20.0	13.9		ug/L		69	22 - 115
Isophorone	20.0	14.9		ug/L		74	38 - 102
Naphthalene	20.0	14.3		ug/L		71	35 - 97
Nitrobenzene	20.0	14.0		ug/L		70	37 - 100
N-Nitrosodiphenylamine	20.0	14.9		ug/L		75	32 - 102
N-Nitrosodi-n-propylamine	20.0	14.7		ug/L		74	34 - 101
Pyrene	20.0	14.9		ug/L		75	35 - 106
Phenol	20.0	13.2		ug/L		66	32 - 95
Phenanthrene	20.0	14.9		ug/L		74	32 - 104
Pentachlorophenol	20.0	12.4		ug/L		62	15 - 111

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	83		16 - 122
2-Fluorobiphenyl	76		19 - 107
2-Fluorophenol	78		10 - 111
Nitrobenzene-d5	70		23 - 112
Phenol-d5	73		15 - 112
Terphenyl-d14	76		10 - 132

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-19852/1-A

Matrix: Solid

Analysis Batch: 20620

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19852

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0017	0.00022	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
4,4'-DDE	ND		0.0017	0.00025	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
4,4'-DDT	ND		0.0017	0.00025	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Aldrin	ND		0.0017	0.00030	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
alpha-BHC	ND		0.0017	0.00027	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
beta-BHC	ND		0.0017	0.00043	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
delta-BHC	ND		0.0017	0.00026	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Dieldrin	ND		0.0017	0.00028	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Endosulfan I	ND		0.0017	0.00031	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Endosulfan II	ND		0.0017	0.00029	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Endosulfan sulfate	ND		0.0017	0.00017	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Endrin	ND		0.0017	0.00032	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Diallate	ND		0.033	0.0028	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
gamma-BHC (Lindane)	ND		0.0017	0.00029	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
gamma-Chlordane	ND		0.0017	0.00033	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Heptachlor	ND		0.0017	0.00037	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Heptachlor epoxide	ND		0.0017	0.00032	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Methoxychlor	ND		0.0033	0.00035	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Toxaphene	ND		0.067	0.011	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Chlordane (technical)	ND		0.017	0.00073	mg/Kg		11/07/11 04:27	11/11/11 18:18	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	97		45 - 130				11/07/11 04:27	11/11/11 18:18	1
Tetrachloro-m-xylene	97		45 - 130				11/07/11 04:27	11/11/11 18:18	1
DCB Decachlorobiphenyl (Surr)	101		45 - 130				11/07/11 04:27	11/11/11 18:18	1
DCB Decachlorobiphenyl (Surr)	100		45 - 130				11/07/11 04:27	11/11/11 18:18	1

Lab Sample ID: LCS 180-19852/2-A

Matrix: Solid

Analysis Batch: 20620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19852

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.0333	0.0303		mg/Kg		91	70 - 135
4,4'-DDE	0.0333	0.0306		mg/Kg		92	70 - 133
4,4'-DDT	0.0333	0.0314		mg/Kg		94	61 - 126
Aldrin	0.0333	0.0303		mg/Kg		91	70 - 123
alpha-BHC	0.0333	0.0311		mg/Kg		93	59 - 127
beta-BHC	0.0333	0.0291		mg/Kg		87	70 - 138
delta-BHC	0.0333	0.0303		mg/Kg		91	40 - 124
Dieldrin	0.0333	0.0306		mg/Kg		92	70 - 123
Endosulfan I	0.0333	0.0297		mg/Kg		89	70 - 126
Endosulfan II	0.0333	0.0297		mg/Kg		89	70 - 128
Endosulfan sulfate	0.0333	0.0286		mg/Kg		86	55 - 140
Endrin	0.0333	0.0299		mg/Kg		90	70 - 127
gamma-BHC (Lindane)	0.0333	0.0297		mg/Kg		89	66 - 124
gamma-Chlordane	0.0333	0.0294		mg/Kg		88	68 - 123
Heptachlor	0.0333	0.0299		mg/Kg		90	70 - 128
Heptachlor epoxide	0.0333	0.0295		mg/Kg		89	69 - 131
Methoxychlor	0.0333	0.0292		mg/Kg		87	70 - 143

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-19852/2-A

Matrix: Solid

Analysis Batch: 20620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19852

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	99		45 - 130
Tetrachloro-m-xylene	97		45 - 130
DCB Decachlorobiphenyl (Surr)	99		45 - 130
DCB Decachlorobiphenyl (Surr)	102		45 - 130

Lab Sample ID: LCSD 180-19852/3-A

Matrix: Solid

Analysis Batch: 20620

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19852

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.0333	0.0308		mg/Kg		92	70 - 135	1	20
4,4'-DDE	0.0333	0.0308		mg/Kg		92	70 - 133	1	20
4,4'-DDT	0.0333	0.0319		mg/Kg		96	61 - 126	1	37
Aldrin	0.0333	0.0305		mg/Kg		91	70 - 123	1	20
alpha-BHC	0.0333	0.0309		mg/Kg		93	59 - 127	1	20
beta-BHC	0.0333	0.0297		mg/Kg		89	70 - 138	2	20
delta-BHC	0.0333	0.0303		mg/Kg		91	40 - 124	0	20
Dieldrin	0.0333	0.0308		mg/Kg		93	70 - 123	1	20
Endosulfan I	0.0333	0.0303		mg/Kg		91	70 - 126	2	23
Endosulfan II	0.0333	0.0306		mg/Kg		92	70 - 128	3	33
Endosulfan sulfate	0.0333	0.0295		mg/Kg		89	55 - 140	3	26
Endrin	0.0333	0.0311		mg/Kg		93	70 - 127	4	20
gamma-BHC (Lindane)	0.0333	0.0299		mg/Kg		90	66 - 124	0	20
gamma-Chlordane	0.0333	0.0298		mg/Kg		89	68 - 123	1	24
Heptachlor	0.0333	0.0304		mg/Kg		91	70 - 128	1	20
Heptachlor epoxide	0.0333	0.0302		mg/Kg		90	69 - 131	2	20
Methoxychlor	0.0333	0.0298		mg/Kg		89	70 - 143	2	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	98		45 - 130
Tetrachloro-m-xylene	94		45 - 130
DCB Decachlorobiphenyl (Surr)	98		45 - 130
DCB Decachlorobiphenyl (Surr)	97		45 - 130

Lab Sample ID: MB 180-20429/1-A

Matrix: Solid

Analysis Batch: 22196

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20429

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0017	0.00022	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
4,4'-DDE	ND		0.0017	0.00025	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
4,4'-DDT	ND		0.0017	0.00025	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Aldrin	ND		0.0017	0.00030	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
alpha-BHC	ND		0.0017	0.00027	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
beta-BHC	ND		0.0017	0.00043	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
delta-BHC	ND		0.0017	0.00026	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Dieldrin	ND		0.0017	0.00028	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Endosulfan I	ND		0.0017	0.00031	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Endosulfan II	ND		0.0017	0.00029	mg/Kg		11/11/11 03:17	11/30/11 17:25	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 180-20429/1-A

Matrix: Solid

Analysis Batch: 22196

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20429

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	ND		0.0017	0.00017	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Endrin	ND		0.0017	0.00032	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Diallate	ND		0.033	0.0028	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
gamma-BHC (Lindane)	ND		0.0017	0.00029	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
gamma-Chlordane	ND		0.0017	0.00033	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Heptachlor	ND		0.0017	0.00037	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Heptachlor epoxide	ND		0.0017	0.00032	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Methoxychlor	ND		0.0033	0.00035	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Toxaphene	ND		0.067	0.011	mg/Kg		11/11/11 03:17	11/30/11 17:25	1
Chlordane (technical)	ND		0.017	0.00073	mg/Kg		11/11/11 03:17	11/30/11 17:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		45 - 130	11/11/11 03:17	11/30/11 17:25	1
Tetrachloro-m-xylene	79		45 - 130	11/11/11 03:17	11/30/11 17:25	1
DCB Decachlorobiphenyl (Surr)	84		45 - 130	11/11/11 03:17	11/30/11 17:25	1
DCB Decachlorobiphenyl (Surr)	88		45 - 130	11/11/11 03:17	11/30/11 17:25	1

Lab Sample ID: LCS 180-20429/15-A

Matrix: Solid

Analysis Batch: 22196

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.0333	0.0294		mg/Kg		88	70 - 135
4,4'-DDE	0.0333	0.0281		mg/Kg		84	70 - 133
4,4'-DDT	0.0333	0.0285		mg/Kg		86	61 - 126
Aldrin	0.0333	0.0270		mg/Kg		81	70 - 123
alpha-BHC	0.0333	0.0278		mg/Kg		83	59 - 127
beta-BHC	0.0333	0.0266		mg/Kg		80	70 - 138
delta-BHC	0.0333	0.0278		mg/Kg		83	40 - 124
Dieldrin	0.0333	0.0276		mg/Kg		83	70 - 123
Endosulfan I	0.0333	0.0278		mg/Kg		83	70 - 126
Endosulfan II	0.0333	0.0272		mg/Kg		82	70 - 128
Endosulfan sulfate	0.0333	0.0292		mg/Kg		88	55 - 140
Endrin	0.0333	0.0288		mg/Kg		86	70 - 127
gamma-BHC (Lindane)	0.0333	0.0273		mg/Kg		82	66 - 124
gamma-Chlordane	0.0333	0.0275		mg/Kg		83	68 - 123
Heptachlor	0.0333	0.0296		mg/Kg		89	70 - 128
Heptachlor epoxide	0.0333	0.0279		mg/Kg		84	69 - 131
Methoxychlor	0.0333	0.0318		mg/Kg		95	70 - 143

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	83		45 - 130
Tetrachloro-m-xylene	87		45 - 130
DCB Decachlorobiphenyl (Surr)	84		45 - 130
DCB Decachlorobiphenyl (Surr)	91		45 - 130

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 180-20429/16-A

Matrix: Solid

Analysis Batch: 22196

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20429

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.0333	0.0272		mg/Kg		82	70 - 135	10	20
4,4'-DDE	0.0333	0.0263		mg/Kg		79	70 - 133	7	20
4,4'-DDT	0.0333	0.0271		mg/Kg		81	61 - 126	5	37
Aldrin	0.0333	0.0265		mg/Kg		80	70 - 123	2	20
alpha-BHC	0.0333	0.0273		mg/Kg		82	59 - 127	2	20
beta-BHC	0.0333	0.0258		mg/Kg		77	70 - 138	3	20
delta-BHC	0.0333	0.0266		mg/Kg		80	40 - 124	4	20
Dieldrin	0.0333	0.0261		mg/Kg		78	70 - 123	5	20
Endosulfan I	0.0333	0.0277		mg/Kg		83	70 - 126	0	23
Endosulfan II	0.0333	0.0268		mg/Kg		80	70 - 128	1	33
Endosulfan sulfate	0.0333	0.0284		mg/Kg		85	55 - 140	3	26
Endrin	0.0333	0.0273		mg/Kg		82	70 - 127	5	20
gamma-BHC (Lindane)	0.0333	0.0266		mg/Kg		80	66 - 124	3	20
gamma-Chlordane	0.0333	0.0270		mg/Kg		81	68 - 123	2	24
Heptachlor	0.0333	0.0285		mg/Kg		86	70 - 128	4	20
Heptachlor epoxide	0.0333	0.0275		mg/Kg		83	69 - 131	0	20
Methoxychlor	0.0333	0.0313		mg/Kg		94	70 - 143	7	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	82		45 - 130
Tetrachloro-m-xylene	79		45 - 130
DCB Decachlorobiphenyl (Surr)	82		45 - 130
DCB Decachlorobiphenyl (Surr)	84		45 - 130

Lab Sample ID: MB 180-20610/1-A

Matrix: Solid

Analysis Batch: 21047

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0017	0.00022	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
PCB-1016	ND		0.017	0.0025	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
4,4'-DDE	ND		0.0017	0.00025	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
PCB-1221	ND		0.017	0.0032	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
4,4'-DDT	ND		0.0017	0.00025	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
PCB-1232	ND		0.017	0.0029	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Aldrin	ND		0.0017	0.00030	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
PCB-1242	ND		0.017	0.0027	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
alpha-BHC	ND		0.0017	0.00027	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
PCB-1248	ND		0.017	0.0016	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
beta-BHC	ND		0.0017	0.00043	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
PCB-1254	ND		0.017	0.0024	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
delta-BHC	ND		0.0017	0.00026	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
PCB-1260	ND		0.017	0.0024	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Dieldrin	ND		0.0017	0.00028	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Endosulfan I	ND		0.0017	0.00031	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Endosulfan II	ND		0.0017	0.00029	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Endosulfan sulfate	ND		0.0017	0.00017	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Endrin	ND		0.0017	0.00032	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Diallate	ND		0.033	0.0028	mg/Kg		11/14/11 04:19	11/16/11 13:14	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 180-20610/1-A

Matrix: Solid

Analysis Batch: 21047

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.0017	0.00029	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
gamma-Chlordane	ND		0.0017	0.00033	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Heptachlor	ND		0.0017	0.00037	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Heptachlor epoxide	ND		0.0017	0.00032	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Methoxychlor	ND		0.0033	0.00035	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Toxaphene	ND		0.067	0.011	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Chlordane (technical)	ND		0.017	0.00073	mg/Kg		11/14/11 04:19	11/16/11 13:14	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	100		45 - 130				11/14/11 04:19	11/16/11 13:14	1
Tetrachloro-m-xylene	97		45 - 130				11/14/11 04:19	11/16/11 13:14	1
DCB Decachlorobiphenyl (Surr)	98		45 - 130				11/14/11 04:19	11/16/11 13:14	1
DCB Decachlorobiphenyl (Surr)	96		45 - 130				11/14/11 04:19	11/16/11 13:14	1

Lab Sample ID: LCS 180-20610/2-A

Matrix: Solid

Analysis Batch: 21047

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20610

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.0333	0.0333		mg/Kg		100	70 - 135
4,4'-DDE	0.0333	0.0332		mg/Kg		100	70 - 133
4,4'-DDT	0.0333	0.0316		mg/Kg		95	61 - 126
Aldrin	0.0333	0.0336		mg/Kg		101	70 - 123
alpha-BHC	0.0333	0.0343		mg/Kg		103	59 - 127
beta-BHC	0.0333	0.0317		mg/Kg		95	70 - 138
delta-BHC	0.0333	0.0341		mg/Kg		102	40 - 124
Dieldrin	0.0333	0.0336		mg/Kg		101	70 - 123
Endosulfan I	0.0333	0.0328		mg/Kg		98	70 - 126
Endosulfan II	0.0333	0.0323		mg/Kg		97	70 - 128
Endosulfan sulfate	0.0333	0.0324		mg/Kg		97	55 - 140
Endrin	0.0333	0.0335		mg/Kg		101	70 - 127
gamma-BHC (Lindane)	0.0333	0.0331		mg/Kg		99	66 - 124
gamma-Chlordane	0.0333	0.0321		mg/Kg		96	68 - 123
Heptachlor	0.0333	0.0336		mg/Kg		101	70 - 128
Heptachlor epoxide	0.0333	0.0333		mg/Kg		100	69 - 131
Methoxychlor	0.0333	0.0299		mg/Kg		90	70 - 143
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Tetrachloro-m-xylene	103		45 - 130				
Tetrachloro-m-xylene	100		45 - 130				
DCB Decachlorobiphenyl (Surr)	98		45 - 130				
DCB Decachlorobiphenyl (Surr)	99		45 - 130				

Lab Sample ID: 180-5830-1 MS

Matrix: Solid

Analysis Batch: 21047

Client Sample ID: B-3(6')-11/10/11

Prep Type: Total/NA

Prep Batch: 20610

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		0.0386	0.0114	J p F	mg/Kg	☼	30	70 - 135

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-5830-1 MS

Matrix: Solid

Analysis Batch: 21047

Client Sample ID: B-3(6')-11/10/11

Prep Type: Total/NA

Prep Batch: 20610

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDE	ND		0.0386	0.0257	F	mg/Kg	✱	67	70 - 133
4,4'-DDT	ND		0.0386	0.0258		mg/Kg	✱	67	61 - 126
Aldrin	ND		0.0386	ND	F	mg/Kg	✱	0	70 - 123
alpha-BHC	ND		0.0386	ND	F	mg/Kg	✱	0	59 - 127
beta-BHC	ND		0.0386	0.00669	J F	mg/Kg	✱	17	70 - 138
delta-BHC	ND		0.0386	0.0142	J p F	mg/Kg	✱	37	40 - 124
Dieldrin	0.012		0.0386	0.0320		mg/Kg	✱	83	70 - 123
Endosulfan I	ND		0.0386	0.0255	F	mg/Kg	✱	66	70 - 126
Endosulfan II	ND		0.0386	0.0147	J p F	mg/Kg	✱	38	70 - 128
Endosulfan sulfate	ND		0.0386	0.0124	J p F	mg/Kg	✱	32	55 - 140
Endrin	ND		0.0386	0.0261	F	mg/Kg	✱	68	70 - 127
gamma-BHC (Lindane)	0.028		0.0386	0.0286	p F	mg/Kg	✱	-7	66 - 124
gamma-Chlordane	ND		0.0386	0.0290		mg/Kg	✱	75	68 - 123
Heptachlor	ND		0.0386	0.0134	J p F	mg/Kg	✱	35	70 - 128
Heptachlor epoxide	ND		0.0386	0.0110	J p F	mg/Kg	✱	28	69 - 131
Methoxychlor	0.0092	J p	0.0386	0.0319	J p F	mg/Kg	✱	59	70 - 143

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	21	p X D	45 - 130
Tetrachloro-m-xylene	83	D	45 - 130
DCB Decachlorobiphenyl (Surr)	83	D	45 - 130
DCB Decachlorobiphenyl (Surr)	9	p X D	45 - 130

Lab Sample ID: 180-5830-1 MSD

Matrix: Solid

Analysis Batch: 21047

Client Sample ID: B-3(6')-11/10/11

Prep Type: Total/NA

Prep Batch: 20610

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
4,4'-DDD	ND		0.0389	0.0101	J p F	mg/Kg	✱	26	70 - 135	13	20
4,4'-DDE	ND		0.0389	0.0264	F	mg/Kg	✱	68	70 - 133	3	20
4,4'-DDT	ND		0.0389	0.0250		mg/Kg	✱	64	61 - 126	3	37
Aldrin	ND		0.0389	ND	F	mg/Kg	✱	0	70 - 123	NC	20
alpha-BHC	ND		0.0389	ND	F	mg/Kg	✱	0	59 - 127	NC	20
beta-BHC	ND		0.0389	ND	F	mg/Kg	✱	0	70 - 138	NC	20
delta-BHC	ND		0.0389	0.0139	J p F	mg/Kg	✱	36	40 - 124	2	20
Dieldrin	0.012		0.0389	0.0307		mg/Kg	✱	79	70 - 123	4	20
Endosulfan I	ND		0.0389	0.0281		mg/Kg	✱	72	70 - 126	10	23
Endosulfan II	ND		0.0389	0.0151	J p F	mg/Kg	✱	39	70 - 128	2	33
Endosulfan sulfate	ND		0.0389	0.0112	J p F	mg/Kg	✱	29	55 - 140	10	26
Endrin	ND		0.0389	0.0256	F	mg/Kg	✱	66	70 - 127	2	20
gamma-BHC (Lindane)	0.028		0.0389	0.0279	p F	mg/Kg	✱	-9	66 - 124	2	20
gamma-Chlordane	ND		0.0389	0.0310		mg/Kg	✱	80	68 - 123	7	24
Heptachlor	ND		0.0389	0.0170	J p F	mg/Kg	✱	44	70 - 128	23	20
Heptachlor epoxide	ND		0.0389	0.0117	J p F	mg/Kg	✱	30	69 - 131	6	20
Methoxychlor	0.0092	J p	0.0389	0.0673	F	mg/Kg	✱	149	70 - 143	71	26

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	22	p X D	45 - 130
Tetrachloro-m-xylene	82	D	45 - 130

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-5830-1 MSD

Matrix: Solid

Analysis Batch: 21047

Client Sample ID: B-3(6')-11/10/11

Prep Type: Total/NA

Prep Batch: 20610

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	98	D	45 - 130
DCB Decachlorobiphenyl (Surr)	11	p X D	45 - 130

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-19852/1-A

Matrix: Solid

Analysis Batch: 20980

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19852

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0025	mg/Kg		11/07/11 04:27	11/11/11 17:57	1
PCB-1221	ND		0.017	0.0032	mg/Kg		11/07/11 04:27	11/11/11 17:57	1
PCB-1232	ND		0.017	0.0029	mg/Kg		11/07/11 04:27	11/11/11 17:57	1
PCB-1242	ND		0.017	0.0027	mg/Kg		11/07/11 04:27	11/11/11 17:57	1
PCB-1248	ND		0.017	0.0016	mg/Kg		11/07/11 04:27	11/11/11 17:57	1
PCB-1254	ND		0.017	0.0024	mg/Kg		11/07/11 04:27	11/11/11 17:57	1
PCB-1260	ND		0.017	0.0024	mg/Kg		11/07/11 04:27	11/11/11 17:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		35 - 140	11/07/11 04:27	11/11/11 17:57	1
DCB Decachlorobiphenyl (Surr)	106		35 - 140	11/07/11 04:27	11/11/11 17:57	1

Lab Sample ID: LCS 180-19852/4-A

Matrix: Solid

Analysis Batch: 20980

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19852

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.33	1.26		mg/Kg		94	55 - 130
PCB-1260	1.33	1.28		mg/Kg		96	54 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	107		35 - 140
DCB Decachlorobiphenyl (Surr)	107		35 - 140

Lab Sample ID: LCSD 180-19852/5-A

Matrix: Solid

Analysis Batch: 20980

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19852

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	1.33	1.26		mg/Kg		94	55 - 130	0	35
PCB-1260	1.33	1.29		mg/Kg		96	54 - 130	1	29

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	105		35 - 140
DCB Decachlorobiphenyl (Surr)	106		35 - 140

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 180-20093/1-A

Matrix: Solid

Analysis Batch: 20562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20093

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0025	mg/Kg		11/09/11 02:59	11/10/11 01:30	1
PCB-1221	ND		0.017	0.0032	mg/Kg		11/09/11 02:59	11/10/11 01:30	1
PCB-1232	ND		0.017	0.0029	mg/Kg		11/09/11 02:59	11/10/11 01:30	1
PCB-1242	ND		0.017	0.0027	mg/Kg		11/09/11 02:59	11/10/11 01:30	1
PCB-1248	ND		0.017	0.0016	mg/Kg		11/09/11 02:59	11/10/11 01:30	1
PCB-1254	ND		0.017	0.0024	mg/Kg		11/09/11 02:59	11/10/11 01:30	1
PCB-1260	ND		0.017	0.0024	mg/Kg		11/09/11 02:59	11/10/11 01:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	100		35 - 140	11/09/11 02:59	11/10/11 01:30	1
DCB Decachlorobiphenyl (Surr)	110		35 - 140	11/09/11 02:59	11/10/11 01:30	1

Lab Sample ID: LCS 180-20093/2-A

Matrix: Solid

Analysis Batch: 20562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.33	1.24		mg/Kg		93	55 - 130
PCB-1260	1.33	1.21		mg/Kg		91	54 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	103		35 - 140
DCB Decachlorobiphenyl (Surr)	101		35 - 140

Lab Sample ID: MB 180-20429/1-A

Matrix: Solid

Analysis Batch: 20923

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20429

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0025	mg/Kg		11/11/11 03:17	11/13/11 11:12	1
PCB-1221	ND		0.017	0.0032	mg/Kg		11/11/11 03:17	11/13/11 11:12	1
PCB-1232	ND		0.017	0.0029	mg/Kg		11/11/11 03:17	11/13/11 11:12	1
PCB-1242	ND		0.017	0.0027	mg/Kg		11/11/11 03:17	11/13/11 11:12	1
PCB-1248	ND		0.017	0.0016	mg/Kg		11/11/11 03:17	11/13/11 11:12	1
PCB-1254	ND		0.017	0.0024	mg/Kg		11/11/11 03:17	11/13/11 11:12	1
PCB-1260	ND		0.017	0.0024	mg/Kg		11/11/11 03:17	11/13/11 11:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		35 - 140	11/11/11 03:17	11/13/11 11:12	1
DCB Decachlorobiphenyl (Surr)	95		35 - 140	11/11/11 03:17	11/13/11 11:12	1

Lab Sample ID: LCS 180-20429/2-A

Matrix: Solid

Analysis Batch: 20923

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.33	1.00		mg/Kg		75	55 - 130
PCB-1260	1.33	0.965		mg/Kg		72	54 - 130

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 180-20429/2-A

Matrix: Solid

Analysis Batch: 20923

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20429

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	87		35 - 140
DCB Decachlorobiphenyl (Surr)	79		35 - 140

Lab Sample ID: LCS 180-20610/5-A

Matrix: Solid

Analysis Batch: 21298

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20610

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.33	1.27		mg/Kg		95	55 - 130
PCB-1260	1.33	1.25		mg/Kg		94	54 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	109		35 - 140
DCB Decachlorobiphenyl (Surr)	104		35 - 140

Lab Sample ID: 180-5830-1 MS

Matrix: Solid

Analysis Batch: 21298

Client Sample ID: B-3(6')-11/10/11

Prep Type: Total/NA

Prep Batch: 20610

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		1.54	1.20		mg/Kg	☼	77	55 - 130
PCB-1260	ND		1.54	1.20		mg/Kg	☼	78	54 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	83		35 - 140
DCB Decachlorobiphenyl (Surr)	82		35 - 140

Lab Sample ID: 180-5830-1 MSD

Matrix: Solid

Analysis Batch: 21298

Client Sample ID: B-3(6')-11/10/11

Prep Type: Total/NA

Prep Batch: 20610

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		1.54	1.15		mg/Kg	☼	75	55 - 130	4	35
PCB-1260	ND		1.54	1.19		mg/Kg	☼	77	54 - 130	1	29

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	84		35 - 140
DCB Decachlorobiphenyl (Surr)	84		35 - 140

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-20428/1-A

Matrix: Solid

Analysis Batch: 21225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20428

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	50		42 - 140	11/11/11 03:12	11/18/11 14:45	20

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: MB 180-20428/1-A

Matrix: Solid

Analysis Batch: 21224

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20428

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.080	0.0055	mg/Kg		11/11/11 03:12	11/18/11 15:10	20
2,4,5-T	ND		0.020	0.0025	mg/Kg		11/11/11 03:12	11/18/11 15:10	20
Silvex (2,4,5-TP)	ND		0.020	0.0021	mg/Kg		11/11/11 03:12	11/18/11 15:10	20

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	56		42 - 140	11/11/11 03:12	11/18/11 15:10	20

Lab Sample ID: LCS 180-20428/2-A

Matrix: Solid

Analysis Batch: 21225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-D	0.320	0.121		mg/Kg		38	30 - 140
2,4,5-T	0.0800	0.0326		mg/Kg		41	30 - 140
Silvex (2,4,5-TP)	0.0800	0.0457		mg/Kg		57	40 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	68		42 - 140

Lab Sample ID: LCS 180-20428/2-A

Matrix: Solid

Analysis Batch: 21224

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20428

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	74		42 - 140

Lab Sample ID: 180-5679-2 MS

Matrix: Solid

Analysis Batch: 21225

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20428

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-D	ND		0.378	0.128		mg/Kg	☼	34	30 - 140
2,4,5-T	ND		0.0945	0.0361		mg/Kg	☼	38	30 - 140
Silvex (2,4,5-TP)	ND		0.0945	0.0557		mg/Kg	☼	59	40 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4-Dichlorophenylacetic acid	66		42 - 140

Lab Sample ID: 180-5679-2 MS

Matrix: Solid

Analysis Batch: 21224

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20428

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4-Dichlorophenylacetic acid	67		42 - 140

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 180-5679-2 MSD

Matrix: Solid

Analysis Batch: 21225

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20428

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-D	ND		0.379	0.150		mg/Kg	☼	39	30 - 140	16	30
2,4,5-T	ND		0.0947	0.0429		mg/Kg	☼	45	30 - 140	17	30
Silvex (2,4,5-TP)	ND		0.0947	0.0600		mg/Kg	☼	63	40 - 130	7	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
2,4-Dichlorophenylacetic acid	69		42 - 140								

Lab Sample ID: 180-5679-2 MSD

Matrix: Solid

Analysis Batch: 21224

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 20428

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	70		42 - 140

Lab Sample ID: MB 180-20784/1-A

Matrix: Solid

Analysis Batch: 21225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20784

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	58		42 - 140	11/15/11 10:04	11/18/11 09:51	20

Lab Sample ID: MB 180-20784/1-A

Matrix: Solid

Analysis Batch: 21224

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20784

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.080	0.0055	mg/Kg		11/15/11 10:04	11/18/11 10:16	20
2,4,5-T	ND		0.020	0.0025	mg/Kg		11/15/11 10:04	11/18/11 10:16	20
Silvex (2,4,5-TP)	ND		0.020	0.0021	mg/Kg		11/15/11 10:04	11/18/11 10:16	20
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	62		42 - 140				11/15/11 10:04	11/18/11 10:16	20

Lab Sample ID: LCS 180-20784/2-A

Matrix: Solid

Analysis Batch: 21225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20784

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	60		42 - 140

Lab Sample ID: LCS 180-20784/2-A

Matrix: Solid

Analysis Batch: 21224

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-D	0.320	0.129		mg/Kg		40	30 - 140
2,4,5-T	0.0800	0.0388		mg/Kg		48	30 - 140
Silvex (2,4,5-TP)	0.0800	0.0490		mg/Kg		61	40 - 130

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 180-20784/2-A

Matrix: Solid

Analysis Batch: 21224

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20784

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	66		42 - 140

Lab Sample ID: LCSD 180-20784/3-A

Matrix: Solid

Analysis Batch: 21225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20784

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	70		42 - 140

Lab Sample ID: LCSD 180-20784/3-A

Matrix: Solid

Analysis Batch: 21224

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20784

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-D	0.320	0.147		mg/Kg		46	30 - 140	NaN	30
2,4,5-T	0.0800	0.0440		mg/Kg		55	30 - 140	13	30
Silvex (2,4,5-TP)	0.0800	0.0542		mg/Kg		68	40 - 130	10	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2,4-Dichlorophenylacetic acid	71		42 - 140						

Method: 6010B - Lead

Lab Sample ID: MB 180-20226/1-A

Matrix: Water

Analysis Batch: 20612

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20226

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	9.7	ug/L		11/09/11 16:47	11/10/11 17:14	1
Antimony	ND		10	1.3	ug/L		11/09/11 16:47	11/10/11 17:14	1
Arsenic	ND		10	2.7	ug/L		11/09/11 16:47	11/10/11 17:14	1
Barium	ND		200	0.62	ug/L		11/09/11 16:47	11/10/11 17:14	1
Boron	ND		200	1.3	ug/L		11/09/11 16:47	11/10/11 17:14	1
Beryllium	ND		4.0	0.23	ug/L		11/09/11 16:47	11/10/11 17:14	1
Cadmium	ND		5.0	0.13	ug/L		11/09/11 16:47	11/10/11 17:14	1
Calcium	ND		5000	9.7	ug/L		11/09/11 16:47	11/10/11 17:14	1
Chromium	ND		5.0	0.57	ug/L		11/09/11 16:47	11/10/11 17:14	1
Cobalt	ND		50	0.40	ug/L		11/09/11 16:47	11/10/11 17:14	1
Copper	ND		25	2.7	ug/L		11/09/11 16:47	11/10/11 17:14	1
Iron	ND		100	12	ug/L		11/09/11 16:47	11/10/11 17:14	1
Lead	ND		3.0	1.3	ug/L		11/09/11 16:47	11/10/11 17:14	1
Magnesium	ND		5000	21	ug/L		11/09/11 16:47	11/10/11 17:14	1
Manganese	ND		15	0.68	ug/L		11/09/11 16:47	11/10/11 17:14	1
Nickel	ND		40	1.6	ug/L		11/09/11 16:47	11/10/11 17:14	1
Potassium	ND		5000	750	ug/L		11/09/11 16:47	11/10/11 17:14	1
Selenium	ND		5.0	3.0	ug/L		11/09/11 16:47	11/10/11 17:14	1
Silver	ND		5.0	0.68	ug/L		11/09/11 16:47	11/10/11 17:14	1
Sodium	ND		5000	220	ug/L		11/09/11 16:47	11/10/11 17:14	1
Thallium	ND		10	2.4	ug/L		11/09/11 16:47	11/10/11 17:14	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 6010B - Lead (Continued)

Lab Sample ID: MB 180-20226/1-A

Matrix: Water

Analysis Batch: 20612

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20226

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		50	1.9	ug/L		11/09/11 16:47	11/10/11 17:14	1
Zinc	3.83	J	20	2.5	ug/L		11/09/11 16:47	11/10/11 17:14	1

Lab Sample ID: LCS 180-20226/2-A

Matrix: Water

Analysis Batch: 20612

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20226

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2000	2020		ug/L		101	80 - 120
Antimony	500	518		ug/L		104	80 - 120
Arsenic	2000	2040		ug/L		102	80 - 120
Barium	2000	2040		ug/L		102	80 - 120
Boron	1000	1020		ug/L		102	80 - 120
Beryllium	50.0	51.4		ug/L		103	80 - 120
Cadmium	50.0	49.7		ug/L		99	80 - 120
Calcium	50000	50700		ug/L		101	80 - 120
Chromium	200	203		ug/L		102	80 - 120
Cobalt	500	500		ug/L		100	80 - 120
Copper	250	253		ug/L		101	80 - 120
Iron	1000	932		ug/L		93	80 - 120
Lead	500	505		ug/L		101	80 - 120
Magnesium	50000	51300		ug/L		103	80 - 120
Manganese	500	510		ug/L		102	80 - 120
Nickel	500	500		ug/L		100	80 - 120
Potassium	50000	52100		ug/L		104	80 - 120
Selenium	2000	2020		ug/L		101	80 - 120
Silver	50.0	51.5		ug/L		103	80 - 120
Sodium	50000	51700		ug/L		103	80 - 120
Thallium	2000	2030		ug/L		102	80 - 120
Vanadium	500	513		ug/L		103	80 - 120
Zinc	500	523		ug/L		105	80 - 120

Lab Sample ID: 180-5679-4 MS

Matrix: Water

Analysis Batch: 20612

Client Sample ID: B-5W-11-8-11

Prep Type: Total/NA

Prep Batch: 20226

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500		2000	2610		ug/L		106	75 - 125
Antimony	1.8	J	500	550		ug/L		110	75 - 125
Arsenic	6.1	J	2000	2170		ug/L		108	75 - 125
Barium	91	J	2000	2240		ug/L		107	75 - 125
Boron	41	J	1000	1110		ug/L		107	75 - 125
Beryllium	ND		50.0	53.4		ug/L		107	75 - 125
Cadmium	ND		50.0	50.9		ug/L		102	75 - 125
Calcium	240000		50000	284000	4	ug/L		86	75 - 125
Chromium	ND		200	211		ug/L		105	75 - 125
Cobalt	ND		500	519		ug/L		104	75 - 125
Copper	ND		250	273		ug/L		109	75 - 125
Iron	280		1000	1250		ug/L		96	75 - 125
Lead	ND		500	520		ug/L		104	75 - 125

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 6010B - Lead (Continued)

Lab Sample ID: 180-5679-4 MS

Matrix: Water

Analysis Batch: 20612

Client Sample ID: B-5W-11-8-11

Prep Type: Total/NA

Prep Batch: 20226

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	ND		50000	52000		ug/L		104	75 - 125
Manganese	ND		500	534		ug/L		107	75 - 125
Nickel	ND		500	518		ug/L		104	75 - 125
Potassium	36000		50000	92400		ug/L		113	75 - 125
Selenium	14		2000	1940		ug/L		96	75 - 125
Silver	ND		50.0	55.1		ug/L		110	75 - 125
Sodium	200000		50000	251000	4	ug/L		98	75 - 125
Thallium	2.5	J	2000	2090		ug/L		104	75 - 125
Vanadium	5.0	J	500	541		ug/L		107	75 - 125
Zinc	5.8	J B	500	554		ug/L		110	75 - 125

Lab Sample ID: 180-5679-4 MSD

Matrix: Water

Analysis Batch: 20612

Client Sample ID: B-5W-11-8-11

Prep Type: Total/NA

Prep Batch: 20226

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	500		2000	2530		ug/L		102	75 - 125	3	20
Antimony	1.8	J	500	535		ug/L		107	75 - 125	3	20
Arsenic	6.1	J	2000	2120		ug/L		105	75 - 125	3	20
Barium	91	J	2000	2180		ug/L		105	75 - 125	3	20
Boron	41	J	1000	1080		ug/L		104	75 - 125	2	20
Beryllium	ND		50.0	52.1		ug/L		104	75 - 125	2	20
Cadmium	ND		50.0	49.3		ug/L		99	75 - 125	3	20
Calcium	240000		50000	274000	4	ug/L		66	75 - 125	4	20
Chromium	ND		200	206		ug/L		103	75 - 125	2	20
Cobalt	ND		500	504		ug/L		101	75 - 125	3	20
Copper	ND		250	267		ug/L		107	75 - 125	2	20
Iron	280		1000	1240		ug/L		96	75 - 125	0	20
Lead	ND		500	509		ug/L		102	75 - 125	2	20
Magnesium	ND		50000	51300		ug/L		103	75 - 125	1	20
Manganese	ND		500	521		ug/L		104	75 - 125	3	20
Nickel	ND		500	502		ug/L		100	75 - 125	3	20
Potassium	36000		50000	90700		ug/L		110	75 - 125	2	20
Selenium	14		2000	1860		ug/L		92	75 - 125	4	20
Silver	ND		50.0	53.8		ug/L		108	75 - 125	2	20
Sodium	200000		50000	244000	4	ug/L		85	75 - 125	3	20
Thallium	2.5	J	2000	2040		ug/L		102	75 - 125	2	20
Vanadium	5.0	J	500	526		ug/L		104	75 - 125	3	20
Zinc	5.8	J B	500	539		ug/L		107	75 - 125	3	20

Lab Sample ID: MB 180-20458/1-A

Matrix: Water

Analysis Batch: 20753

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	9.7	ug/L		11/11/11 09:31	11/14/11 12:57	1
Antimony	ND		10	1.3	ug/L		11/11/11 09:31	11/14/11 12:57	1
Arsenic	ND		10	2.7	ug/L		11/11/11 09:31	11/14/11 12:57	1
Barium	ND		200	0.62	ug/L		11/11/11 09:31	11/14/11 12:57	1
Boron	ND		200	1.3	ug/L		11/11/11 09:31	11/14/11 12:57	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 6010B - Lead (Continued)

Lab Sample ID: MB 180-20458/1-A

Matrix: Water

Analysis Batch: 20753

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		4.0	0.23	ug/L		11/11/11 09:31	11/14/11 12:57	1
Cadmium	ND		5.0	0.13	ug/L		11/11/11 09:31	11/14/11 12:57	1
Calcium	ND		5000	9.7	ug/L		11/11/11 09:31	11/14/11 12:57	1
Chromium	ND		5.0	0.57	ug/L		11/11/11 09:31	11/14/11 12:57	1
Cobalt	ND		50	0.40	ug/L		11/11/11 09:31	11/14/11 12:57	1
Copper	ND		25	2.7	ug/L		11/11/11 09:31	11/14/11 12:57	1
Iron	ND		100	12	ug/L		11/11/11 09:31	11/14/11 12:57	1
Lead	ND		3.0	1.3	ug/L		11/11/11 09:31	11/14/11 12:57	1
Magnesium	ND		5000	21	ug/L		11/11/11 09:31	11/14/11 12:57	1
Manganese	ND		15	0.68	ug/L		11/11/11 09:31	11/14/11 12:57	1
Nickel	ND		40	1.6	ug/L		11/11/11 09:31	11/14/11 12:57	1
Potassium	ND		5000	750	ug/L		11/11/11 09:31	11/14/11 12:57	1
Selenium	ND		5.0	3.0	ug/L		11/11/11 09:31	11/14/11 12:57	1
Silver	ND		5.0	0.68	ug/L		11/11/11 09:31	11/14/11 12:57	1
Sodium	ND		5000	220	ug/L		11/11/11 09:31	11/14/11 12:57	1
Thallium	2.74	J	10	2.4	ug/L		11/11/11 09:31	11/14/11 12:57	1
Vanadium	ND		50	1.9	ug/L		11/11/11 09:31	11/14/11 12:57	1
Zinc	5.63	J	20	2.5	ug/L		11/11/11 09:31	11/14/11 12:57	1

Lab Sample ID: LCS 180-20458/2-A

Matrix: Water

Analysis Batch: 20753

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20458

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2000	1960		ug/L		98	80 - 120
Antimony	500	509		ug/L		102	80 - 120
Arsenic	2000	1940		ug/L		97	80 - 120
Barium	2000	1970		ug/L		98	80 - 120
Boron	1000	969		ug/L		97	80 - 120
Beryllium	50.0	48.1		ug/L		96	80 - 120
Cadmium	50.0	47.1		ug/L		94	80 - 120
Calcium	50000	50300		ug/L		101	80 - 120
Chromium	200	192		ug/L		96	80 - 120
Cobalt	500	468		ug/L		94	80 - 120
Copper	250	245		ug/L		98	80 - 120
Iron	1000	912		ug/L		91	80 - 120
Lead	500	477		ug/L		95	80 - 120
Magnesium	50000	49900		ug/L		100	80 - 120
Manganese	500	481		ug/L		96	80 - 120
Nickel	500	470		ug/L		94	80 - 120
Potassium	50000	49700		ug/L		99	80 - 120
Selenium	2000	1900		ug/L		95	80 - 120
Silver	50.0	49.0		ug/L		98	80 - 120
Sodium	50000	50100		ug/L		100	80 - 120
Thallium	2000	1920		ug/L		96	80 - 120
Vanadium	500	487		ug/L		97	80 - 120
Zinc	500	494		ug/L		99	80 - 120

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 180-20649/1-A

Matrix: Solid

Analysis Batch: 20907

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20649

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.16	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Arsenic	ND		1.0	0.22	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Barium	0.154	J	20	0.050	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Boron	ND		20	0.26	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Beryllium	0.0340	J	0.40	0.015	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Cadmium	ND		0.50	0.024	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Chromium	ND		0.50	0.085	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Cobalt	ND		5.0	0.089	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Copper	ND		2.5	0.34	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Lead	ND		0.30	0.15	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Manganese	0.0860	J	1.5	0.048	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Nickel	ND		4.0	0.38	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Selenium	ND		0.50	0.21	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Silver	ND		0.50	0.058	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Thallium	ND		1.0	0.21	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Vanadium	ND		5.0	0.19	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Zinc	0.583	J	2.0	0.22	mg/Kg		11/14/11 10:12	11/15/11 16:21	1
Tin	ND		10	0.54	mg/Kg		11/14/11 10:12	11/15/11 16:21	1

Lab Sample ID: LCS 180-20649/2-A

Matrix: Solid

Analysis Batch: 20907

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20649

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	49.3		mg/Kg		99	80 - 120
Arsenic	200	195		mg/Kg		98	80 - 120
Barium	200	195		mg/Kg		97	80 - 120
Boron	100	95.6		mg/Kg		96	80 - 120
Beryllium	5.00	4.93		mg/Kg		99	80 - 120
Cadmium	5.00	4.80		mg/Kg		96	80 - 120
Chromium	20.0	19.6		mg/Kg		98	80 - 120
Cobalt	50.0	47.8		mg/Kg		96	80 - 120
Copper	25.0	24.4		mg/Kg		98	80 - 120
Lead	50.0	48.2		mg/Kg		96	80 - 120
Manganese	50.0	48.6		mg/Kg		97	80 - 120
Nickel	50.0	47.8		mg/Kg		96	80 - 120
Selenium	200	191		mg/Kg		95	80 - 120
Silver	5.00	4.93		mg/Kg		99	80 - 120
Thallium	200	195		mg/Kg		97	80 - 120
Vanadium	50.0	49.2		mg/Kg		98	80 - 120
Zinc	50.0	50.4		mg/Kg		101	80 - 120
Tin	200	199		mg/Kg		100	80 - 120

Lab Sample ID: MB 180-21862/1-A

Matrix: Solid

Analysis Batch: 22084

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.16	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Arsenic	ND		1.0	0.22	mg/Kg		11/28/11 11:45	11/29/11 18:50	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 180-21862/1-A

Matrix: Solid

Analysis Batch: 22084

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.128	J	20	0.050	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Boron	ND		20	0.26	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Beryllium	0.0530	J	0.40	0.015	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Cadmium	ND		0.50	0.024	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Chromium	0.337	J	0.50	0.085	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Cobalt	ND		5.0	0.089	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Copper	ND		2.5	0.34	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Lead	ND		0.30	0.15	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Manganese	ND		1.5	0.048	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Nickel	ND		4.0	0.38	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Selenium	ND		0.50	0.21	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Silver	ND		0.50	0.058	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Thallium	ND		1.0	0.21	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Vanadium	ND		5.0	0.19	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Zinc	1.36	J	2.0	0.22	mg/Kg		11/28/11 11:45	11/29/11 18:50	1
Tin	ND		10	0.54	mg/Kg		11/28/11 11:45	11/29/11 18:50	1

Lab Sample ID: LCS 180-21862/2-A

Matrix: Solid

Analysis Batch: 22084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	49.7		mg/Kg		99	80 - 120
Arsenic	200	197		mg/Kg		99	80 - 120
Barium	200	196		mg/Kg		98	80 - 120
Boron	100	95.9		mg/Kg		96	80 - 120
Beryllium	5.00	5.01		mg/Kg		100	80 - 120
Cadmium	5.00	4.84		mg/Kg		97	80 - 120
Chromium	20.0	19.7		mg/Kg		98	80 - 120
Cobalt	50.0	48.5		mg/Kg		97	80 - 120
Copper	25.0	24.5		mg/Kg		98	80 - 120
Lead	50.0	48.8		mg/Kg		98	80 - 120
Manganese	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	48.6		mg/Kg		97	80 - 120
Selenium	200	194		mg/Kg		97	80 - 120
Silver	5.00	5.00		mg/Kg		100	80 - 120
Thallium	200	197		mg/Kg		98	80 - 120
Vanadium	50.0	49.6		mg/Kg		99	80 - 120
Zinc	50.0	51.3		mg/Kg		103	80 - 120
Tin	200	202		mg/Kg		101	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-21429/1-A

Matrix: Water

Analysis Batch: 21608

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21429

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.038	ug/L		11/21/11 07:20	11/22/11 14:10	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 180-21429/2-A
Matrix: Water
Analysis Batch: 21608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.59		ug/L		104	80 - 120

Lab Sample ID: MB 180-22012/1-A
Matrix: Water
Analysis Batch: 22054

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22012

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.038	ug/L		11/29/11 13:52	11/29/11 18:34	1

Lab Sample ID: LCS 180-22012/2-A
Matrix: Water
Analysis Batch: 22054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22012

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.37		ug/L		95	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 180-20604/1-A
Matrix: Solid
Analysis Batch: 20664

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.011	mg/Kg		11/14/11 03:33	11/14/11 08:40	1

Lab Sample ID: LCS 180-20604/2-A
Matrix: Solid
Analysis Batch: 20664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20604

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.413		mg/Kg		99	80 - 120

Lab Sample ID: MB 180-20733/1-A
Matrix: Solid
Analysis Batch: 20793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.011	mg/Kg		11/15/11 03:50	11/15/11 10:10	1

Lab Sample ID: LCS 180-20733/2-A
Matrix: Solid
Analysis Batch: 20793

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.428		mg/Kg		103	80 - 120

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 180-20886/1-A

Matrix: Solid

Analysis Batch: 20949

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.011	mg/Kg		11/16/11 03:30	11/16/11 08:29	1

Lab Sample ID: LCS 180-20886/2-A

Matrix: Solid

Analysis Batch: 20949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.428		mg/Kg		103	80 - 120

Lab Sample ID: MB 180-21031/1-A

Matrix: Solid

Analysis Batch: 21070

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.011	mg/Kg		11/17/11 03:16	11/17/11 09:22	1

Lab Sample ID: LCS 180-21031/2-A

Matrix: Solid

Analysis Batch: 21070

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.423		mg/Kg		102	80 - 120

Lab Sample ID: MB 180-22065/1-A

Matrix: Solid

Analysis Batch: 22130

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22065

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.011	mg/Kg		11/30/11 07:50	11/30/11 11:47	1

Lab Sample ID: LCS 180-22065/2-A

Matrix: Solid

Analysis Batch: 22130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.396		mg/Kg		95	80 - 120

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 180-20809/1-A

Matrix: Water

Analysis Batch: 20954

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20809

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.0	1.5	mg/L		11/15/11 11:49	11/16/11 11:24	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 180-20809/2-A

Matrix: Water

Analysis Batch: 20954

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20809

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil and Grease)	40.0	37.4		mg/L		94	78 - 114

Lab Sample ID: LCSD 180-20809/3-A

Matrix: Water

Analysis Batch: 20954

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20809

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil and Grease)	40.0	37.9		mg/L		95	78 - 114	1	18

Lab Sample ID: MB 180-21139/1-A

Matrix: Water

Analysis Batch: 21266

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21139

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.0	1.5	mg/L		11/17/11 17:19	11/18/11 16:27	1

Lab Sample ID: LCS 180-21139/2-A

Matrix: Water

Analysis Batch: 21266

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21139

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil and Grease)	40.0	36.5		mg/L		91	78 - 114

Lab Sample ID: LCSD 180-21139/3-A

Matrix: Water

Analysis Batch: 21266

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 21139

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil and Grease)	40.0	38.1		mg/L		95	78 - 114	4	18

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-20208/1-A

Matrix: Water

Analysis Batch: 20377

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20208

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	0.0520	J	0.10	0.033	mg/L		11/09/11 16:00	11/10/11 14:01	1

Lab Sample ID: LCS 180-20208/2-A

Matrix: Water

Analysis Batch: 20377

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20208

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia, distilled	2.00	2.20		mg/L		110	90 - 110

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 180-20786/1-A

Matrix: Water

Analysis Batch: 20848

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10	0.033	mg/L		11/15/11 10:00	11/15/11 14:35	1

Lab Sample ID: LCS 180-20786/2-A

Matrix: Water

Analysis Batch: 20848

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia, distilled	2.00	1.92		mg/L		96	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 180-20242/41

Matrix: Water

Analysis Batch: 20242

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	3.9	mg/L			11/09/11 17:32	1

Lab Sample ID: LCS 180-20242/14

Matrix: Water

Analysis Batch: 20242

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	600	630		mg/L		105	90 - 110

Lab Sample ID: LCSD 180-20242/15

Matrix: Water

Analysis Batch: 20242

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	600	595		mg/L		99	90 - 110	6	20

Lab Sample ID: MB 180-20436/15

Matrix: Water

Analysis Batch: 20436

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	3.9	mg/L			11/11/11 05:52	1

Lab Sample ID: LCS 180-20436/13

Matrix: Water

Analysis Batch: 20436

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	600	584		mg/L		97	90 - 110

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCSD 180-20436/14

Matrix: Water

Analysis Batch: 20436

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	600	580		mg/L		97	90 - 110	1	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-20517/1-A

Matrix: Solid

Analysis Batch: 21652

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20517

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.40	0.10	mg/Kg		11/18/11 10:00	11/22/11 15:08	1

Lab Sample ID: LCS1 180-20517/3-A

Matrix: Solid

Analysis Batch: 21652

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20517

Analyte	Spike Added	LCS1 Result	LCS1 Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	708	676		mg/Kg		96	80 - 120

Lab Sample ID: LCSS 180-20517/2-A

Matrix: Solid

Analysis Batch: 21652

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20517

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	18.8		mg/Kg		94	80 - 120

Lab Sample ID: MB 180-21663/1-A

Matrix: Solid

Analysis Batch: 21789

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21663

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.40	0.10	mg/Kg		11/23/11 09:29	11/26/11 12:09	1

Lab Sample ID: LCS1 180-21663/3-A

Matrix: Solid

Analysis Batch: 21789

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Spike Added	LCS1 Result	LCS1 Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	708	690		mg/Kg		98	80 - 120

Lab Sample ID: LCSS 180-21663/2-A

Matrix: Solid

Analysis Batch: 21789

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	19.2		mg/Kg		96	80 - 120

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 180-5679-2 MSI

Matrix: Solid

Analysis Batch: 21789

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	ND		847	691		mg/Kg	☼	82	75 - 125

Lab Sample ID: 180-5679-2 MSS

Matrix: Solid

Analysis Batch: 21789

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	ND		24.1	12.1	F	mg/Kg	☼	50	75 - 125

Lab Sample ID: 180-5679-2 DU

Matrix: Solid

Analysis Batch: 21789

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	ND		ND		mg/Kg	☼	NC	20

Lab Sample ID: MB 180-21997/1-A

Matrix: Solid

Analysis Batch: 22373

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.40	0.10	mg/Kg		11/29/11 12:30	12/02/11 12:47	1

Lab Sample ID: LCS1 180-21997/3-A

Matrix: Solid

Analysis Batch: 22373

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21997

Analyte	Spike Added	LCS1 Result	LCS1 Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	708	699		mg/Kg		99	80 - 120

Lab Sample ID: LCSS 180-21997/2-A

Matrix: Solid

Analysis Batch: 22373

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21997

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	19.4		mg/Kg		97	80 - 120

Method: 7196A - Chromium, Hexavalent - RE

Lab Sample ID: MB 180-20516/1-A

Matrix: Solid

Analysis Batch: 21671

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) - RE	ND		0.40	0.10	mg/Kg		11/22/11 13:00	11/23/11 10:08	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 7196A - Chromium, Hexavalent - RE (Continued)

Lab Sample ID: LCS1 180-20516/3-B

Matrix: Solid

Analysis Batch: 21671

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20516

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI) - RE	708	695		mg/Kg		98	80 - 120

Lab Sample ID: LCSS 180-20516/2-B

Matrix: Solid

Analysis Batch: 21671

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20516

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI) - RE	20.0	19.1		mg/Kg		95	80 - 120

Lab Sample ID: MB 180-21663/24-A

Matrix: Solid

Analysis Batch: 21877

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21663

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) - RE	ND		0.40	0.10	mg/Kg		11/23/11 09:29	11/28/11 14:56	1

Lab Sample ID: LCS1 180-21663/26-A

Matrix: Solid

Analysis Batch: 21877

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI) - RE	708	670		mg/Kg		95	80 - 120

Lab Sample ID: LCSS 180-21663/25-A

Matrix: Solid

Analysis Batch: 21877

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI) - RE	20.0	20.0		mg/Kg		100	80 - 120

Lab Sample ID: 180-5679-2 MSI

Matrix: Solid

Analysis Batch: 21877

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI) - RE	ND		854	740		mg/Kg	✱	87	75 - 125

Lab Sample ID: 180-5679-2 MSS

Matrix: Solid

Analysis Batch: 21877

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI) - RE	ND		23.6	11.6	F	mg/Kg	✱	49	75 - 125

Lab Sample ID: 180-5679-2 DU

Matrix: Solid

Analysis Batch: 21877

Client Sample ID: B-4 (16')-11-7-11

Prep Type: Total/NA

Prep Batch: 21663

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI) - RE	ND		ND		mg/Kg	✱	NC	20

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 7196A - Chromium, Hexavalent - RE (Continued)

Lab Sample ID: MB 180-22322/1-A

Matrix: Solid

Analysis Batch: 22399

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI) - RE	ND		0.40	0.10	mg/Kg		11/29/11 16:00	12/02/11 15:00	1

Lab Sample ID: LCS1 180-22322/3-A

Matrix: Solid

Analysis Batch: 22399

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22322

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI) - RE	708	613		mg/Kg		87	80 - 120

Lab Sample ID: LCSS 180-22322/2-A

Matrix: Solid

Analysis Batch: 22399

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22322

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI) - RE	20.0	18.1		mg/Kg		90	80 - 120

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 180-20488/5-A

Matrix: Water

Analysis Batch: 20640

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20488

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	1.5	ug/L		11/11/11 12:00	11/14/11 09:09	1

Lab Sample ID: HLCS 180-20488/2-A

Matrix: Water

Analysis Batch: 20640

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20488

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	250	231		ug/L		93	90 - 110

Lab Sample ID: LCS 180-20488/3-A

Matrix: Water

Analysis Batch: 20640

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	200	198		ug/L		99	85 - 115

Lab Sample ID: LCSD 180-20488/4-A

Matrix: Water

Analysis Batch: 20640

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20488

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	200	196		ug/L		98	85 - 115	1	20

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 9012A - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LLCS 180-20488/1-A
Matrix: Water
Analysis Batch: 20640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20488

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	50.0	48.5		ug/L		97	90 - 110

Method: 9040B - pH

Lab Sample ID: LCS 180-20111/1
Matrix: Water
Analysis Batch: 20111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	6.950		SU		99	99 - 101

Lab Sample ID: LCS 180-20339/1
Matrix: Water
Analysis Batch: 20339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	6.950		SU		99	99 - 101

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-20301/6
Matrix: Solid
Analysis Batch: 20301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.679	J	1.0	0.22	mg/Kg			11/08/11 12:06	1
Nitrate as N	ND		0.050	0.015	mg/Kg			11/08/11 12:06	1
Nitrite as N	ND		0.050	0.016	mg/Kg			11/08/11 12:06	1
Sulfate	0.635	J	1.0	0.12	mg/Kg			11/08/11 12:06	1

Lab Sample ID: LCS 180-20301/5
Matrix: Solid
Analysis Batch: 20301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.8		mg/Kg		100	80 - 120
Nitrate as N	2.50	2.51		mg/Kg		100	80 - 120
Nitrite as N	2.50	2.34		mg/Kg		93	80 - 120
Sulfate	50.0	49.2		mg/Kg		98	80 - 120

Lab Sample ID: LCSD 180-20301/7
Matrix: Solid
Analysis Batch: 20301

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	50.0	50.1		mg/Kg		100	80 - 120	1	20
Nitrate as N	2.50	2.51		mg/Kg		100	80 - 120	0	20
Nitrite as N	2.50	2.28		mg/Kg		91	80 - 120	2	20
Sulfate	50.0	49.1		mg/Kg		98	80 - 120	0	20

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-21086/6

Matrix: Solid

Analysis Batch: 21086

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.22	mg/Kg			11/16/11 11:29	1
Nitrate as N	ND		0.050	0.015	mg/Kg			11/16/11 11:29	1
Nitrite as N	ND		0.050	0.016	mg/Kg			11/16/11 11:29	1
Sulfate	ND		1.0	0.12	mg/Kg			11/16/11 11:29	1

Lab Sample ID: LCS 180-21086/5

Matrix: Solid

Analysis Batch: 21086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.2		mg/Kg		100	80 - 120
Nitrate as N	2.50	2.52		mg/Kg		101	80 - 120
Nitrite as N	2.50	2.30		mg/Kg		92	80 - 120
Sulfate	50.0	49.5		mg/Kg		99	80 - 120

Lab Sample ID: LCSD 180-21086/7

Matrix: Solid

Analysis Batch: 21086

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	50.0	50.1		mg/Kg		100	80 - 120	0	20
Nitrate as N	2.50	2.51		mg/Kg		100	80 - 120	0	20
Nitrite as N	2.50	2.30		mg/Kg		92	80 - 120	0	20
Sulfate	50.0	49.2		mg/Kg		98	80 - 120	1	20

Lab Sample ID: MB 180-21195/6

Matrix: Solid

Analysis Batch: 21195

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.22	mg/Kg			11/17/11 12:05	1
Nitrate as N	ND		0.050	0.015	mg/Kg			11/17/11 12:05	1
Nitrite as N	ND		0.050	0.016	mg/Kg			11/17/11 12:05	1
Sulfate	0.665	J	1.0	0.12	mg/Kg			11/17/11 12:05	1

Lab Sample ID: LCS 180-21195/5

Matrix: Solid

Analysis Batch: 21195

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.4		mg/Kg		101	80 - 120
Nitrate as N	2.50	2.53		mg/Kg		101	80 - 120
Nitrite as N	2.50	2.55		mg/Kg		102	80 - 120
Sulfate	50.0	50.0		mg/Kg		100	80 - 120

Lab Sample ID: LCSD 180-21195/7

Matrix: Solid

Analysis Batch: 21195

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	50.0	50.7		mg/Kg		101	80 - 120	0	20

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 180-21195/7

Matrix: Solid

Analysis Batch: 21195

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	2.50	2.54		mg/Kg		102	80 - 120	0	20
Nitrite as N	2.50	2.55		mg/Kg		102	80 - 120	0	20
Sulfate	50.0	50.2		mg/Kg		100	80 - 120	0	20

Lab Sample ID: LB3 180-20041/6-A LB3

Matrix: Solid

Analysis Batch: 20301

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10	2.2	mg/Kg			11/08/11 19:45	1
Nitrate as N	ND		0.50	0.15	mg/Kg			11/08/11 19:45	1
Nitrite as N	ND		0.50	0.16	mg/Kg			11/08/11 19:45	1
Sulfate	7.81	J	10	1.2	mg/Kg			11/08/11 19:45	1

Lab Sample ID: LB3 180-21000/12-A LB3

Matrix: Solid

Analysis Batch: 21086

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.68	J	10	2.2	mg/Kg			11/17/11 00:16	1
Nitrate as N	ND		0.50	0.15	mg/Kg			11/17/11 00:16	1
Nitrite as N	ND		0.50	0.16	mg/Kg			11/17/11 00:16	1
Sulfate	6.67	J	10	1.2	mg/Kg			11/17/11 00:16	1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 180-20199/2

Matrix: Water

Analysis Batch: 20199

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	2.0	mg/L			11/09/11 14:15	1

Lab Sample ID: LCS 180-20199/1

Matrix: Water

Analysis Batch: 20199

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	32.5	28.0		mg/L		86	80 - 120

Lab Sample ID: MB 180-20340/2

Matrix: Water

Analysis Batch: 20340

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	2.0	mg/L			11/10/11 12:16	1

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 180-20340/1

Matrix: Water

Analysis Batch: 20340

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	32.5	30.0		mg/L		92	80 - 120

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 240-22389/1-A

Matrix: Solid

Analysis Batch: 22592

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22389

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.10	mg/Kg		11/08/11 14:34	11/09/11 14:57	1

Lab Sample ID: LCS 240-22389/2-A

Matrix: Solid

Analysis Batch: 22592

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	2.25	2.14		mg/Kg		95	68 - 123

Lab Sample ID: MRL 240-22592/6 MRL

Matrix: Solid

Analysis Batch: 22592

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0100	0.0102		mg/L		102	70 - 130

Lab Sample ID: MB 240-23998/1-A

Matrix: Solid

Analysis Batch: 24101

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.10	mg/Kg		11/18/11 13:22	11/19/11 17:21	1

Lab Sample ID: LCS 240-23998/2-A

Matrix: Solid

Analysis Batch: 24101

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	2.25	2.12		mg/Kg		94	68 - 123

Lab Sample ID: MRL 240-24085/4 MRL

Matrix: Solid

Analysis Batch: 24085

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0100	0.0101		mg/L		101	70 - 130

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: SM 4500 CN I - Cyanide, Weak Acid Dissociable

Lab Sample ID: MB 240-23549/1-A

Matrix: Solid

Analysis Batch: 23613

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Weak Acid Dissociable	ND		0.50	0.16	mg/Kg		11/16/11 11:49	11/16/11 15:08	1

Lab Sample ID: LCS 240-23549/2-A

Matrix: Solid

Analysis Batch: 23613

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Weak Acid Dissociable	2.00	1.67		mg/Kg		84	68 - 123

Lab Sample ID: 180-5679-1 MS

Matrix: Solid

Analysis Batch: 23613

Client Sample ID: B-4 (6')-11-7-11

Prep Type: Total/NA

Prep Batch: 23549

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Weak Acid Dissociable	ND		2.39	2.50		mg/Kg	☼	105	68 - 123

Lab Sample ID: 180-5679-1 MSD

Matrix: Solid

Analysis Batch: 23613

Client Sample ID: B-4 (6')-11-7-11

Prep Type: Total/NA

Prep Batch: 23549

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD Limit
Cyanide, Weak Acid Dissociable	ND		2.44	2.19		mg/Kg	☼	90	68 - 123	14 20

Lab Sample ID: MRL 240-23613/6 MRL

Matrix: Solid

Analysis Batch: 23613

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Weak Acid Dissociable	0.0100	0.0101		mg/L		101	70 - 130

Lab Sample ID: MB 240-24526/1-A

Matrix: Solid

Analysis Batch: 24598

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24526

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Weak Acid Dissociable	ND	^	0.50	0.16	mg/Kg		11/23/11 10:23	11/23/11 15:25	1

Lab Sample ID: LCS 240-24526/2-A

Matrix: Solid

Analysis Batch: 24598

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24526

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Weak Acid Dissociable	1.98	1.67	^	mg/Kg		84	68 - 123

Lab Sample ID: 180-5830-2 MS

Matrix: Solid

Analysis Batch: 24598

Client Sample ID: B-3(16')-11/10/11

Prep Type: Total/NA

Prep Batch: 24526

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Weak Acid Dissociable	0.24	J ^	2.29	2.54	^	mg/Kg	☼	101	68 - 123

QC Sample Results

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Method: SM 4500 CN I - Cyanide, Weak Acid Dissociable (Continued)

Lab Sample ID: 180-5830-2 MSD

Matrix: Solid

Analysis Batch: 24598

Client Sample ID: B-3(16')-11/10/11

Prep Type: Total/NA

Prep Batch: 24526

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Weak Acid Dissociable	0.24	J ^	2.22	2.29	^	mg/Kg	☼	92	68 - 123	11	20

Lab Sample ID: MRL 240-24598/6 MRL

Matrix: Solid

Analysis Batch: 24598

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Weak Acid Dissociable	0.0100	0.00836	J	mg/L		84	70 - 130

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

GC/MS VOA

Prep Batch: 19864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	5035	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	5035	
LCS 180-19864/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 180-19864/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 19871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	8260B	19864
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	8260B	19864
LCS 180-19864/2-A	Lab Control Sample	Total/NA	Solid	8260B	19864
MB 180-19864/1-A	Method Blank	Total/NA	Solid	8260B	19864

Prep Batch: 19971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	5035	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	5035	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	5035	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	5035	
LCS 180-19971/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 180-19971/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 19977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	8260B	19971
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	8260B	19971
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	8260B	19971
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	8260B	19971
LCS 180-19971/2-A	Lab Control Sample	Total/NA	Solid	8260B	19971
MB 180-19971/1-A	Method Blank	Total/NA	Solid	8260B	19971

Prep Batch: 20106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	5035	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	5035	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	5035	
LCS 180-20106/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 180-20106/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 20110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	8260B	20106
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	8260B	20106
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	8260B	20106
LCS 180-20106/2-A	Lab Control Sample	Total/NA	Solid	8260B	20106
MB 180-20106/1-A	Method Blank	Total/NA	Solid	8260B	20106

Prep Batch: 21046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	5035	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	5035	
LCS 180-21046/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 180-21046/1-A	Method Blank	Total/NA	Solid	5035	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

GC/MS VOA (Continued)

Analysis Batch: 21048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	8260B	21046
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	8260B	21046
LCS 180-21046/2-A	Lab Control Sample	Total/NA	Solid	8260B	21046
MB 180-21046/1-A	Method Blank	Total/NA	Solid	8260B	21046

Analysis Batch: 21486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	8260B	
180-5679-5	B-4W-11-8-11	Total/NA	Water	8260B	
LCS 180-21486/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 180-21486/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 180-21486/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 21590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	8260B	
180-5712-2	B-1W-11-9-11	Total/NA	Water	8260B	
LCS 180-21590/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 180-21590/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 180-21590/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 19851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	3541	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	3541	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	3541	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	3541	
LCS 180-19851/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-19851/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	
MB 180-19851/1-A	Method Blank	Total/NA	Solid	3541	

Analysis Batch: 20338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	8270C	19851
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	8270C	19851
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	8270C	19851
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	8270C	19851
LCS 180-19851/2-A	Lab Control Sample	Total/NA	Solid	8270C	19851
LCSD 180-19851/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	19851
MB 180-19851/1-A	Method Blank	Total/NA	Solid	8270C	19851

Prep Batch: 20427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1 - RE	B-2 (6')-11/2/11	Total/NA	Solid	3541	
180-5526-2 - RE	B-2 (16')-11/2/11	Total/NA	Solid	3541	
180-5526-3 - RE	B-1 (6')-11/3/11	Total/NA	Solid	3541	
LCS 180-20427/2-A	Lab Control Sample	Total/NA	Solid	3541	
MB 180-20427/1-A	Method Blank	Total/NA	Solid	3541	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

GC/MS Semi VOA (Continued)

Prep Batch: 20447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	3520C	
180-5679-4 - DL	B-5W-11-8-11	Total/NA	Water	3520C	
180-5679-5	B-4W-11-8-11	Total/NA	Water	3520C	
180-5679-5 - DL	B-4W-11-8-11	Total/NA	Water	3520C	
LCS 180-20447/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-20447/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 20532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	3541	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	3541	
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	3541	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	3541	
180-5679-2 MS	B-4 (16')-11-7-11	Total/NA	Solid	3541	
180-5679-2 MSD	B-4 (16')-11-7-11	Total/NA	Solid	3541	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	3541	
LCS 180-20532/2-A	Lab Control Sample	Total/NA	Solid	3541	
MB 180-20532/1-A	Method Blank	Total/NA	Solid	3541	

Analysis Batch: 20547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1 - RE	B-2 (6')-11/2/11	Total/NA	Solid	8270C	20427
180-5526-2 - RE	B-2 (16')-11/2/11	Total/NA	Solid	8270C	20427
180-5526-3 - RE	B-1 (6')-11/3/11	Total/NA	Solid	8270C	20427
LCS 180-20427/2-A	Lab Control Sample	Total/NA	Solid	8270C	20427
MB 180-20427/1-A	Method Blank	Total/NA	Solid	8270C	20427

Prep Batch: 20631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	3520C	
180-5712-1 - DL	B-2W-11-9-11	Total/NA	Water	3520C	
180-5712-2	B-1W-11-9-11	Total/NA	Water	3520C	
180-5712-2 - DL	B-1W-11-9-11	Total/NA	Water	3520C	
LCS 180-20631/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 180-20631/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 20744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	8270C LL	20447
180-5679-5	B-4W-11-8-11	Total/NA	Water	8270C LL	20447
LCS 180-20447/2-A	Lab Control Sample	Total/NA	Water	8270C LL	20447
LCSD 180-20447/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	20447

Prep Batch: 20747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	3541	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	3541	
LCS 180-20747/2-A	Lab Control Sample	Total/NA	Solid	3541	
MB 180-20747/1-A	Method Blank	Total/NA	Solid	3541	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

GC/MS Semi VOA (Continued)

Analysis Batch: 20884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	8270C	20532
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	8270C	20532
180-5679-2 MSD	B-4 (16')-11-7-11	Total/NA	Solid	8270C	20532
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	8270C	20532
LCS 180-20532/2-A	Lab Control Sample	Total/NA	Solid	8270C	20532
MB 180-20427/1-A	Method Blank	Total/NA	Solid	8270C	20427
MB 180-20532/1-A	Method Blank	Total/NA	Solid	8270C	20532

Analysis Batch: 20906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4 - DL	B-5W-11-8-11	Total/NA	Water	8270C LL	20447
180-5679-5 - DL	B-4W-11-8-11	Total/NA	Water	8270C LL	20447
LCS 180-20631/2-A	Lab Control Sample	Total/NA	Water	8270C LL	20631
MB 180-20631/1-A	Method Blank	Total/NA	Water	8270C LL	20631

Prep Batch: 21153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1 - RE	B-4 (6')-11-7-11	Total/NA	Solid	3541	
LCS 180-21153/2-A	Lab Control Sample	Total/NA	Solid	3541	
MB 180-21153/1-A	Method Blank	Total/NA	Solid	3541	

Analysis Batch: 21163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	8270C LL	20631
180-5712-2	B-1W-11-9-11	Total/NA	Water	8270C LL	20631

Analysis Batch: 21184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	8270C	20532
180-5679-2 MS	B-4 (16')-11-7-11	Total/NA	Solid	8270C	20532

Analysis Batch: 21248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	8270C	20747
LCS 180-20747/2-A	Lab Control Sample	Total/NA	Solid	8270C	20747
MB 180-20747/1-A	Method Blank	Total/NA	Solid	8270C	20747

Analysis Batch: 21296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1 - DL	B-2W-11-9-11	Total/NA	Water	8270C LL	20631
180-5712-2 - DL	B-1W-11-9-11	Total/NA	Water	8270C LL	20631

Analysis Batch: 21469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	8270C	20532
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	8270C	20747

Analysis Batch: 21730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1 - RE	B-4 (6')-11-7-11	Total/NA	Solid	8270C	21153
LCS 180-21153/2-A	Lab Control Sample	Total/NA	Solid	8270C	21153
MB 180-21153/1-A	Method Blank	Total/NA	Solid	8270C	21153

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

GC Semi VOA

Prep Batch: 19852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	3541	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	3541	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	3541	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	3541	
LCS 180-19852/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCS 180-19852/4-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-19852/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	
LCSD 180-19852/5-A	Lab Control Sample Dup	Total/NA	Solid	3541	
MB 180-19852/1-A	Method Blank	Total/NA	Solid	3541	

Prep Batch: 20093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	3541	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	3541	
LCS 180-20093/2-A	Lab Control Sample	Total/NA	Solid	3541	
MB 180-20093/1-A	Method Blank	Total/NA	Solid	3541	

Prep Batch: 20428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	8151A	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	8151A	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	8151A	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	8151A	
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	8151A	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	8151A	
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	8151A	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	8151A	
180-5679-2 MS	B-4 (16')-11-7-11	Total/NA	Solid	8151A	
180-5679-2 MSD	B-4 (16')-11-7-11	Total/NA	Solid	8151A	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	8151A	
LCS 180-20428/2-A	Lab Control Sample	Total/NA	Solid	8151A	
MB 180-20428/1-A	Method Blank	Total/NA	Solid	8151A	

Prep Batch: 20429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	3541	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	3541	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	3541	
LCS 180-20429/15-A	Lab Control Sample	Total/NA	Solid	3541	
LCS 180-20429/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-20429/16-A	Lab Control Sample Dup	Total/NA	Solid	3541	
MB 180-20429/1-A	Method Blank	Total/NA	Solid	3541	

Analysis Batch: 20562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	8082	20093
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	8082	20093
LCS 180-20093/2-A	Lab Control Sample	Total/NA	Solid	8082	20093
MB 180-20093/1-A	Method Blank	Total/NA	Solid	8082	20093

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

GC Semi VOA (Continued)

Prep Batch: 20610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	3541	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	3541	
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	3541	
180-5830-1 MS	B-3(6')-11/10/11	Total/NA	Solid	3541	
180-5830-1 MS	B-3(6')-11/10/11	Total/NA	Solid	3541	
180-5830-1 MSD	B-3(6')-11/10/11	Total/NA	Solid	3541	
180-5830-1 MSD	B-3(6')-11/10/11	Total/NA	Solid	3541	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	3541	
LCS 180-20610/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCS 180-20610/5-A	Lab Control Sample	Total/NA	Solid	3541	
MB 180-20610/1-A	Method Blank	Total/NA	Solid	3541	

Analysis Batch: 20620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	8081A	19852
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	8081A	19852
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	8081A	19852
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	8081A	19852
LCS 180-19852/2-A	Lab Control Sample	Total/NA	Solid	8081A	19852
LCSD 180-19852/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	19852
MB 180-19852/1-A	Method Blank	Total/NA	Solid	8081A	19852

Prep Batch: 20784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	8151A	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	8151A	
LCS 180-20784/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-20784/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	
MB 180-20784/1-A	Method Blank	Total/NA	Solid	8151A	

Analysis Batch: 20923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	8082	20429
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	8082	20429
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	8082	20429
LCS 180-20429/2-A	Lab Control Sample	Total/NA	Solid	8082	20429
MB 180-20429/1-A	Method Blank	Total/NA	Solid	8082	20429

Analysis Batch: 20980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	8082	19852
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	8082	19852
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	8082	19852
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	8082	19852
LCS 180-19852/4-A	Lab Control Sample	Total/NA	Solid	8082	19852
LCSD 180-19852/5-A	Lab Control Sample Dup	Total/NA	Solid	8082	19852
MB 180-19852/1-A	Method Blank	Total/NA	Solid	8082	19852

Analysis Batch: 21047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	8081A	20610
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	8081A	20610

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

GC Semi VOA (Continued)

Analysis Batch: 21047 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	8081A	20610
180-5830-1 MS	B-3(6')-11/10/11	Total/NA	Solid	8081A	20610
180-5830-1 MSD	B-3(6')-11/10/11	Total/NA	Solid	8081A	20610
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	8081A	20610
LCS 180-20610/2-A	Lab Control Sample	Total/NA	Solid	8081A	20610
MB 180-20610/1-A	Method Blank	Total/NA	Solid	8081A	20610

Analysis Batch: 21224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	8151A	20428
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	8151A	20428
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	8151A	20428
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	8151A	20428
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	8151A	20428
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	8151A	20428
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	8151A	20428
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	8151A	20428
180-5679-2 MS	B-4 (16')-11-7-11	Total/NA	Solid	8151A	20428
180-5679-2 MSD	B-4 (16')-11-7-11	Total/NA	Solid	8151A	20428
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	8151A	20428
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	8151A	20784
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	8151A	20784
LCS 180-20428/2-A	Lab Control Sample	Total/NA	Solid	8151A	20428
LCS 180-20784/2-A	Lab Control Sample	Total/NA	Solid	8151A	20784
LCSD 180-20784/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	20784
MB 180-20428/1-A	Method Blank	Total/NA	Solid	8151A	20428
MB 180-20784/1-A	Method Blank	Total/NA	Solid	8151A	20784

Analysis Batch: 21225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	8151A	20428
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	8151A	20428
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	8151A	20428
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	8151A	20428
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	8151A	20428
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	8151A	20428
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	8151A	20428
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	8151A	20428
180-5679-2 MS	B-4 (16')-11-7-11	Total/NA	Solid	8151A	20428
180-5679-2 MSD	B-4 (16')-11-7-11	Total/NA	Solid	8151A	20428
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	8151A	20428
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	8151A	20784
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	8151A	20784
LCS 180-20428/2-A	Lab Control Sample	Total/NA	Solid	8151A	20428
LCS 180-20784/2-A	Lab Control Sample	Total/NA	Solid	8151A	20784
LCSD 180-20784/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	20784
MB 180-20428/1-A	Method Blank	Total/NA	Solid	8151A	20428
MB 180-20784/1-A	Method Blank	Total/NA	Solid	8151A	20784

Analysis Batch: 21298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	8082	20610

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

GC Semi VOA (Continued)

Analysis Batch: 21298 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1 MS	B-3(6')-11/10/11	Total/NA	Solid	8082	20610
180-5830-1 MSD	B-3(6')-11/10/11	Total/NA	Solid	8082	20610
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	8082	20610
LCS 180-20610/5-A	Lab Control Sample	Total/NA	Solid	8082	20610

Analysis Batch: 22196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	8081A	20429
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	8081A	20429
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	8081A	20429
LCS 180-20429/15-A	Lab Control Sample	Total/NA	Solid	8081A	20429
LCS 180-20429/16-A	Lab Control Sample Dup	Total/NA	Solid	8081A	20429
MB 180-20429/1-A	Method Blank	Total/NA	Solid	8081A	20429

Metals

Prep Batch: 20226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	3010A	
180-5679-4 MS	B-5W-11-8-11	Total/NA	Water	3010A	
180-5679-4 MSD	B-5W-11-8-11	Total/NA	Water	3010A	
180-5679-5	B-4W-11-8-11	Total/NA	Water	3010A	
LCS 180-20226/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 180-20226/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 20458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	3010A	
180-5712-2	B-1W-11-9-11	Total/NA	Water	3010A	
LCS 180-20458/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 180-20458/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 20604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	7471A	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	7471A	
LCS 180-20604/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 180-20604/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 20612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	6010B	20226
180-5679-4 MS	B-5W-11-8-11	Total/NA	Water	6010B	20226
180-5679-4 MSD	B-5W-11-8-11	Total/NA	Water	6010B	20226
180-5679-5	B-4W-11-8-11	Total/NA	Water	6010B	20226
LCS 180-20226/2-A	Lab Control Sample	Total/NA	Water	6010B	20226
MB 180-20226/1-A	Method Blank	Total/NA	Water	6010B	20226

Prep Batch: 20649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	3050B	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	3050B	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Metals (Continued)

Prep Batch: 20649 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	3050B	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	3050B	
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	3050B	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	3050B	
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	3050B	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	3050B	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	3050B	
LCS 180-20649/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 180-20649/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 20664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	7471A	20604
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	7471A	20604
LCS 180-20604/2-A	Lab Control Sample	Total/NA	Solid	7471A	20604
MB 180-20604/1-A	Method Blank	Total/NA	Solid	7471A	20604

Prep Batch: 20733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	7471A	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	7471A	
LCS 180-20733/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 180-20733/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 20753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	6010B	20458
180-5712-2	B-1W-11-9-11	Total/NA	Water	6010B	20458
LCS 180-20458/2-A	Lab Control Sample	Total/NA	Water	6010B	20458
MB 180-20458/1-A	Method Blank	Total/NA	Water	6010B	20458

Analysis Batch: 20793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	7471A	20733
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	7471A	20733
LCS 180-20733/2-A	Lab Control Sample	Total/NA	Solid	7471A	20733
MB 180-20733/1-A	Method Blank	Total/NA	Solid	7471A	20733

Prep Batch: 20886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	7471A	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	7471A	
LCS 180-20886/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 180-20886/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 20907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	6010B	20649
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	6010B	20649
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	6010B	20649
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	6010B	20649
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	6010B	20649

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Metals (Continued)

Analysis Batch: 20907 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	6010B	20649
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	6010B	20649
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	6010B	20649
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	6010B	20649
LCS 180-20649/2-A	Lab Control Sample	Total/NA	Solid	6010B	20649
MB 180-20649/1-A	Method Blank	Total/NA	Solid	6010B	20649

Analysis Batch: 20949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	7471A	20886
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	7471A	20886
LCS 180-20886/2-A	Lab Control Sample	Total/NA	Solid	7471A	20886
MB 180-20886/1-A	Method Blank	Total/NA	Solid	7471A	20886

Analysis Batch: 20987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	6010B	20649
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	6010B	20649
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	6010B	20649
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	6010B	20649
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	6010B	20649
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	6010B	20649

Prep Batch: 21031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	7471A	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	7471A	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	7471A	
LCS 180-21031/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 180-21031/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 21070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	7471A	21031
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	7471A	21031
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	7471A	21031
LCS 180-21031/2-A	Lab Control Sample	Total/NA	Solid	7471A	21031
MB 180-21031/1-A	Method Blank	Total/NA	Solid	7471A	21031

Prep Batch: 21429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	7470A	
180-5679-5	B-4W-11-8-11	Total/NA	Water	7470A	
LCS 180-21429/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 180-21429/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 21608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	7470A	21429
180-5679-5	B-4W-11-8-11	Total/NA	Water	7470A	21429
LCS 180-21429/2-A	Lab Control Sample	Total/NA	Water	7470A	21429
MB 180-21429/1-A	Method Blank	Total/NA	Water	7470A	21429

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

Metals (Continued)

Prep Batch: 21862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	3050B	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	3050B	
LCS 180-21862/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 180-21862/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 22012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	7470A	
180-5712-2	B-1W-11-9-11	Total/NA	Water	7470A	
LCS 180-22012/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 180-22012/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 22054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	7470A	22012
180-5712-2	B-1W-11-9-11	Total/NA	Water	7470A	22012
LCS 180-22012/2-A	Lab Control Sample	Total/NA	Water	7470A	22012
MB 180-22012/1-A	Method Blank	Total/NA	Water	7470A	22012

Prep Batch: 22065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	7471A	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	7471A	
LCS 180-22065/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 180-22065/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 22084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	6010B	21862
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	6010B	21862
LCS 180-21862/2-A	Lab Control Sample	Total/NA	Solid	6010B	21862
MB 180-21862/1-A	Method Blank	Total/NA	Solid	6010B	21862

Analysis Batch: 22130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	7471A	22065
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	7471A	22065
LCS 180-22065/2-A	Lab Control Sample	Total/NA	Solid	7471A	22065
MB 180-22065/1-A	Method Blank	Total/NA	Solid	7471A	22065

Analysis Batch: 22209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	6010B	21862

General Chemistry

Analysis Batch: 19637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	Moisture	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	Moisture	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	Moisture	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	Moisture	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Analysis Batch: 19928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	Moisture	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	Moisture	

Leach Batch: 20041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Soluble	Solid	DI Leach	
180-5526-2	B-2 (16')-11/2/11	Soluble	Solid	DI Leach	
180-5526-3	B-1 (6')-11/3/11	Soluble	Solid	DI Leach	
180-5526-4	B-1 (15')-11/3/11	Soluble	Solid	DI Leach	
LB3 180-20041/6-A LB3	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 20111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	9040B	
180-5679-5	B-4W-11-8-11	Total/NA	Water	9040B	
LCS 180-20111/1	Lab Control Sample	Total/NA	Water	9040B	

Analysis Batch: 20199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	SM 2540D	
180-5679-5	B-4W-11-8-11	Total/NA	Water	SM 2540D	
LCS 180-20199/1	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 180-20199/2	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 20208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	Distill/Ammonia	
180-5679-5	B-4W-11-8-11	Total/NA	Water	Distill/Ammonia	
LCS 180-20208/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
MB 180-20208/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 20220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	Moisture	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	Moisture	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	Moisture	

Analysis Batch: 20242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	410.4	
180-5679-5	B-4W-11-8-11	Total/NA	Water	410.4	
LCS 180-20242/14	Lab Control Sample	Total/NA	Water	410.4	
LCSD 180-20242/15	Lab Control Sample Dup	Total/NA	Water	410.4	
MB 180-20242/41	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 20301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Soluble	Solid	9056A	
180-5526-2	B-2 (16')-11/2/11	Soluble	Solid	9056A	
180-5526-2	B-2 (16')-11/2/11	Soluble	Solid	9056A	
180-5526-3	B-1 (6')-11/3/11	Soluble	Solid	9056A	
180-5526-4	B-1 (15')-11/3/11	Soluble	Solid	9056A	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Analysis Batch: 20301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-4	B-1 (15')-11/3/11	Soluble	Solid	9056A	
LB3 180-20041/6-A LB3	Method Blank	Soluble	Solid	9056A	
LCS 180-20301/5	Lab Control Sample	Total/NA	Solid	9056A	
LCSD 180-20301/7	Lab Control Sample Dup	Total/NA	Solid	9056A	
MB 180-20301/6	Method Blank	Total/NA	Solid	9056A	

Analysis Batch: 20339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	9040B	
180-5712-2	B-1W-11-9-11	Total/NA	Water	9040B	
LCS 180-20339/1	Lab Control Sample	Total/NA	Water	9040B	

Analysis Batch: 20340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	SM 2540D	
180-5712-2	B-1W-11-9-11	Total/NA	Water	SM 2540D	
LCS 180-20340/1	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 180-20340/2	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 20377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	350.1	20208
180-5679-5	B-4W-11-8-11	Total/NA	Water	350.1	20208
LCS 180-20208/2-A	Lab Control Sample	Total/NA	Water	350.1	20208
MB 180-20208/1-A	Method Blank	Total/NA	Water	350.1	20208

Analysis Batch: 20436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	410.4	
180-5712-2	B-1W-11-9-11	Total/NA	Water	410.4	
LCS 180-20436/13	Lab Control Sample	Total/NA	Water	410.4	
LCSD 180-20436/14	Lab Control Sample Dup	Total/NA	Water	410.4	
MB 180-20436/15	Method Blank	Total/NA	Water	410.4	

Prep Batch: 20488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	9012A	
180-5679-5	B-4W-11-8-11	Total/NA	Water	9012A	
180-5712-1	B-2W-11-9-11	Total/NA	Water	9012A	
180-5712-2	B-1W-11-9-11	Total/NA	Water	9012A	
HLCS 180-20488/2-A	Lab Control Sample	Total/NA	Water	9012A	
LCS 180-20488/3-A	Lab Control Sample	Total/NA	Water	9012A	
LCSD 180-20488/4-A	Lab Control Sample Dup	Total/NA	Water	9012A	
LLCS 180-20488/1-A	Lab Control Sample	Total/NA	Water	9012A	
MB 180-20488/5-A	Method Blank	Total/NA	Water	9012A	

Prep Batch: 20516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1 - RE	B-2 (6')-11/2/11	Total/NA	Solid	3060A	
180-5526-2 - RE	B-2 (16')-11/2/11	Total/NA	Solid	3060A	
180-5526-3 - RE	B-1 (6')-11/3/11	Total/NA	Solid	3060A	
180-5526-4 - RE	B-1 (15')-11/3/11	Total/NA	Solid	3060A	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Prep Batch: 20516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1 - RE	B-5(6')-11/4/11	Total/NA	Solid	3060A	
180-5622-2 - RE	B-5(16')-11/4/11	Total/NA	Solid	3060A	
LCSI 180-20516/3-B - RE	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-20516/2-B - RE	Lab Control Sample	Total/NA	Solid	3060A	
MB 180-20516/1-A - RE	Method Blank	Total/NA	Solid	3060A	

Prep Batch: 20517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	3060A	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	3060A	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	3060A	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	3060A	
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	3060A	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	3060A	
LCSI 180-20517/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-20517/2-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 180-20517/1-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 20557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	Moisture	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	Moisture	

Analysis Batch: 20640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	9012A	20488
180-5679-5	B-4W-11-8-11	Total/NA	Water	9012A	20488
180-5712-1	B-2W-11-9-11	Total/NA	Water	9012A	20488
180-5712-2	B-1W-11-9-11	Total/NA	Water	9012A	20488
HLCS 180-20488/2-A	Lab Control Sample	Total/NA	Water	9012A	20488
LCS 180-20488/3-A	Lab Control Sample	Total/NA	Water	9012A	20488
LCSD 180-20488/4-A	Lab Control Sample Dup	Total/NA	Water	9012A	20488
LLCS 180-20488/1-A	Lab Control Sample	Total/NA	Water	9012A	20488
MB 180-20488/5-A	Method Blank	Total/NA	Water	9012A	20488

Prep Batch: 20786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	Distill/Ammonia	
180-5712-2	B-1W-11-9-11	Total/NA	Water	Distill/Ammonia	
LCS 180-20786/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
MB 180-20786/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	

Prep Batch: 20809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	1664A	
180-5679-5	B-4W-11-8-11	Total/NA	Water	1664A	
LCS 180-20809/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-20809/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-20809/1-A	Method Blank	Total/NA	Water	1664A	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Analysis Batch: 20848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	350.1	20786
180-5712-2	B-1W-11-9-11	Total/NA	Water	350.1	20786
LCS 180-20786/2-A	Lab Control Sample	Total/NA	Water	350.1	20786
MB 180-20786/1-A	Method Blank	Total/NA	Water	350.1	20786

Analysis Batch: 20954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-4	B-5W-11-8-11	Total/NA	Water	1664A	20809
180-5679-5	B-4W-11-8-11	Total/NA	Water	1664A	20809
LCS 180-20809/2-A	Lab Control Sample	Total/NA	Water	1664A	20809
LCSD 180-20809/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	20809
MB 180-20809/1-A	Method Blank	Total/NA	Water	1664A	20809

Leach Batch: 21000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Soluble	Solid	DI Leach	
180-5622-2	B-5(16')-11/4/11	Soluble	Solid	DI Leach	
180-5679-1	B-4 (6')-11-7-11	Soluble	Solid	DI Leach	
180-5679-2	B-4 (16')-11-7-11	Soluble	Solid	DI Leach	
180-5679-3	B-6 (6')-11-8-11	Soluble	Solid	DI Leach	
180-5830-1	B-3(6')-11/10/11	Soluble	Solid	DI Leach	
180-5830-2	B-3(16')-11/10/11	Soluble	Solid	DI Leach	
LB3 180-21000/12-A LB3	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 21086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Soluble	Solid	9056A	
180-5622-1	B-5(6')-11/4/11	Soluble	Solid	9056A	
180-5622-2	B-5(16')-11/4/11	Soluble	Solid	9056A	
180-5622-2	B-5(16')-11/4/11	Soluble	Solid	9056A	
180-5679-1	B-4 (6')-11-7-11	Soluble	Solid	9056A	
180-5679-2	B-4 (16')-11-7-11	Soluble	Solid	9056A	
180-5679-2	B-4 (16')-11-7-11	Soluble	Solid	9056A	
180-5679-3	B-6 (6')-11-8-11	Soluble	Solid	9056A	
180-5830-1	B-3(6')-11/10/11	Soluble	Solid	9056A	
180-5830-2	B-3(16')-11/10/11	Soluble	Solid	9056A	
LB3 180-21000/12-A LB3	Method Blank	Soluble	Solid	9056A	
LCS 180-21086/5	Lab Control Sample	Total/NA	Solid	9056A	
LCSD 180-21086/7	Lab Control Sample Dup	Total/NA	Solid	9056A	
MB 180-21086/6	Method Blank	Total/NA	Solid	9056A	

Prep Batch: 21139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	1664A	
180-5712-2	B-1W-11-9-11	Total/NA	Water	1664A	
LCS 180-21139/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-21139/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-21139/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 21195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Soluble	Solid	9056A	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Analysis Batch: 21195 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-21195/5	Lab Control Sample	Total/NA	Solid	9056A	
LCSD 180-21195/7	Lab Control Sample Dup	Total/NA	Solid	9056A	
MB 180-21195/6	Method Blank	Total/NA	Solid	9056A	

Analysis Batch: 21266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5712-1	B-2W-11-9-11	Total/NA	Water	1664A	21139
180-5712-2	B-1W-11-9-11	Total/NA	Water	1664A	21139
LCS 180-21139/2-A	Lab Control Sample	Total/NA	Water	1664A	21139
LCSD 180-21139/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	21139
MB 180-21139/1-A	Method Blank	Total/NA	Water	1664A	21139

Analysis Batch: 21652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	7196A	20517
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	7196A	20517
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	7196A	20517
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	7196A	20517
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	7196A	20517
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	7196A	20517
LCSI 180-20517/3-A	Lab Control Sample	Total/NA	Solid	7196A	20517
LCSS 180-20517/2-A	Lab Control Sample	Total/NA	Solid	7196A	20517
MB 180-20517/1-A	Method Blank	Total/NA	Solid	7196A	20517

Prep Batch: 21663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	3060A	
180-5679-1 - RE	B-4 (6')-11-7-11	Total/NA	Solid	3060A	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	3060A	
180-5679-2 - RE	B-4 (16')-11-7-11	Total/NA	Solid	3060A	
180-5679-2 DU	B-4 (16')-11-7-11	Total/NA	Solid	3060A	
180-5679-2 DU - RE	B-4 (16')-11-7-11	Total/NA	Solid	3060A	
180-5679-2 MSI	B-4 (16')-11-7-11	Total/NA	Solid	3060A	
180-5679-2 MSI - RE	B-4 (16')-11-7-11	Total/NA	Solid	3060A	
180-5679-2 MSS	B-4 (16')-11-7-11	Total/NA	Solid	3060A	
180-5679-2 MSS - RE	B-4 (16')-11-7-11	Total/NA	Solid	3060A	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	3060A	
180-5679-3 - RE	B-6 (6')-11-8-11	Total/NA	Solid	3060A	
LCSI 180-21663/26-A - RE	Lab Control Sample	Total/NA	Solid	3060A	
LCSI 180-21663/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-21663/25-A - RE	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-21663/2-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 180-21663/1-A	Method Blank	Total/NA	Solid	3060A	
MB 180-21663/24-A - RE	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 21671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1 - RE	B-2 (6')-11/2/11	Total/NA	Solid	7196A	20516
180-5526-2 - RE	B-2 (16')-11/2/11	Total/NA	Solid	7196A	20516
180-5526-3 - RE	B-1 (6')-11/3/11	Total/NA	Solid	7196A	20516
180-5526-4 - RE	B-1 (15')-11/3/11	Total/NA	Solid	7196A	20516
180-5622-1 - RE	B-5(6')-11/4/11	Total/NA	Solid	7196A	20516

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Analysis Batch: 21671 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-2 - RE	B-5(16')-11/4/11	Total/NA	Solid	7196A	20516
LCSI 180-20516/3-B - RE	Lab Control Sample	Total/NA	Solid	7196A	20516
LCSS 180-20516/2-B - RE	Lab Control Sample	Total/NA	Solid	7196A	20516
MB 180-20516/1-A - RE	Method Blank	Total/NA	Solid	7196A	20516

Analysis Batch: 21789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-2 DU	B-4 (16')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-2 MSI	B-4 (16')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-2 MSS	B-4 (16')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	7196A	21663
LCSI 180-21663/3-A	Lab Control Sample	Total/NA	Solid	7196A	21663
LCSS 180-21663/2-A	Lab Control Sample	Total/NA	Solid	7196A	21663
MB 180-21663/1-A	Method Blank	Total/NA	Solid	7196A	21663

Analysis Batch: 21877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5679-1 - RE	B-4 (6')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-2 - RE	B-4 (16')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-2 DU - RE	B-4 (16')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-2 MSI - RE	B-4 (16')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-2 MSS - RE	B-4 (16')-11-7-11	Total/NA	Solid	7196A	21663
180-5679-3 - RE	B-6 (6')-11-8-11	Total/NA	Solid	7196A	21663
LCSI 180-21663/26-A - RE	Lab Control Sample	Total/NA	Solid	7196A	21663
LCSS 180-21663/25-A - RE	Lab Control Sample	Total/NA	Solid	7196A	21663
MB 180-21663/24-A - RE	Method Blank	Total/NA	Solid	7196A	21663

Analysis Batch: 21994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	7196A	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	7196A	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	7196A	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	7196A	

Prep Batch: 21997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	3060A	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	3060A	
LCSI 180-21997/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-21997/2-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 180-21997/1-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 22030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	7196A	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	7196A	
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	7196A	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	7196A	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	7196A	

QC Association Summary

Client: GAI Consultants
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TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Prep Batch: 22322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1 - RE	B-3(6')-11/10/11	Total/NA	Solid	3060A	
180-5830-2 - RE	B-3(16')-11/10/11	Total/NA	Solid	3060A	
LCSI 180-22322/3-A - RE	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-22322/2-A - RE	Lab Control Sample	Total/NA	Solid	3060A	
MB 180-22322/1-A - RE	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 22373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	7196A	21997
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	7196A	21997
LCSI 180-21997/3-A	Lab Control Sample	Total/NA	Solid	7196A	21997
LCSS 180-21997/2-A	Lab Control Sample	Total/NA	Solid	7196A	21997
MB 180-21997/1-A	Method Blank	Total/NA	Solid	7196A	21997

Prep Batch: 22389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	Distill/CN	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	Distill/CN	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	Distill/CN	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	Distill/CN	
LCS 240-22389/2-A	Lab Control Sample	Total/NA	Solid	Distill/CN	
MB 240-22389/1-A	Method Blank	Total/NA	Solid	Distill/CN	

Analysis Batch: 22399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1 - RE	B-3(6')-11/10/11	Total/NA	Solid	7196A	22322
180-5830-2 - RE	B-3(16')-11/10/11	Total/NA	Solid	7196A	22322
LCSI 180-22322/3-A - RE	Lab Control Sample	Total/NA	Solid	7196A	22322
LCSS 180-22322/2-A - RE	Lab Control Sample	Total/NA	Solid	7196A	22322
MB 180-22322/1-A - RE	Method Blank	Total/NA	Solid	7196A	22322

Analysis Batch: 22592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	SM 4500 CN E	22389
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	SM 4500 CN E	22389
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	SM 4500 CN E	22389
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	SM 4500 CN E	22389
LCS 240-22389/2-A	Lab Control Sample	Total/NA	Solid	SM 4500 CN E	22389
MB 240-22389/1-A	Method Blank	Total/NA	Solid	SM 4500 CN E	22389
MRL 240-22592/6 MRL	Lab Control Sample	Total/NA	Solid	SM 4500 CN E	

Analysis Batch: 22785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	7196A	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	7196A	

Prep Batch: 23549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	SM 4500 CN I	
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	SM 4500 CN I	
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	SM 4500 CN I	
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	SM 4500 CN I	

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Prep Batch: 23549 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	SM 4500 CN I	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	SM 4500 CN I	
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	SM 4500 CN I	
180-5679-1 MS	B-4 (6')-11-7-11	Total/NA	Solid	SM 4500 CN I	
180-5679-1 MSD	B-4 (6')-11-7-11	Total/NA	Solid	SM 4500 CN I	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	SM 4500 CN I	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	SM 4500 CN I	
LCS 240-23549/2-A	Lab Control Sample	Total/NA	Solid	SM 4500 CN I	
MB 240-23549/1-A	Method Blank	Total/NA	Solid	SM 4500 CN I	

Analysis Batch: 23613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5526-1	B-2 (6')-11/2/11	Total/NA	Solid	SM 4500 CN I	23549
180-5526-2	B-2 (16')-11/2/11	Total/NA	Solid	SM 4500 CN I	23549
180-5526-3	B-1 (6')-11/3/11	Total/NA	Solid	SM 4500 CN I	23549
180-5526-4	B-1 (15')-11/3/11	Total/NA	Solid	SM 4500 CN I	23549
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	SM 4500 CN I	23549
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	SM 4500 CN I	23549
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	SM 4500 CN I	23549
180-5679-1 MS	B-4 (6')-11-7-11	Total/NA	Solid	SM 4500 CN I	23549
180-5679-1 MSD	B-4 (6')-11-7-11	Total/NA	Solid	SM 4500 CN I	23549
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	SM 4500 CN I	23549
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	SM 4500 CN I	23549
LCS 240-23549/2-A	Lab Control Sample	Total/NA	Solid	SM 4500 CN I	23549
MB 240-23549/1-A	Method Blank	Total/NA	Solid	SM 4500 CN I	23549
MRL 240-23613/6 MRL	Lab Control Sample	Total/NA	Solid	SM 4500 CN I	

Prep Batch: 23998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	Distill/CN	
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	Distill/CN	
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	Distill/CN	
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	Distill/CN	
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	Distill/CN	
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	Distill/CN	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	Distill/CN	
LCS 240-23998/2-A	Lab Control Sample	Total/NA	Solid	Distill/CN	
MB 240-23998/1-A	Method Blank	Total/NA	Solid	Distill/CN	

Analysis Batch: 24085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 240-24085/4 MRL	Lab Control Sample	Total/NA	Solid	SM 4500 CN E	

Analysis Batch: 24101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5622-1	B-5(6')-11/4/11	Total/NA	Solid	SM 4500 CN E	23998
180-5622-2	B-5(16')-11/4/11	Total/NA	Solid	SM 4500 CN E	23998
180-5679-1	B-4 (6')-11-7-11	Total/NA	Solid	SM 4500 CN E	23998
180-5679-2	B-4 (16')-11-7-11	Total/NA	Solid	SM 4500 CN E	23998
180-5679-3	B-6 (6')-11-8-11	Total/NA	Solid	SM 4500 CN E	23998
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	SM 4500 CN E	23998
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	SM 4500 CN E	23998

QC Association Summary

Client: GAI Consultants
Project/Site: USS Clairton - C071418.13

TestAmerica Job ID: 180-5622-1

General Chemistry (Continued)

Analysis Batch: 24101 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-23998/2-A	Lab Control Sample	Total/NA	Solid	SM 4500 CN E	23998
MB 240-23998/1-A	Method Blank	Total/NA	Solid	SM 4500 CN E	23998

Prep Batch: 24526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	SM 4500 CN I	
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	SM 4500 CN I	
180-5830-2 MS	B-3(16')-11/10/11	Total/NA	Solid	SM 4500 CN I	
180-5830-2 MSD	B-3(16')-11/10/11	Total/NA	Solid	SM 4500 CN I	
LCS 240-24526/2-A	Lab Control Sample	Total/NA	Solid	SM 4500 CN I	
MB 240-24526/1-A	Method Blank	Total/NA	Solid	SM 4500 CN I	

Analysis Batch: 24598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-5830-1	B-3(6')-11/10/11	Total/NA	Solid	SM 4500 CN I	24526
180-5830-2	B-3(16')-11/10/11	Total/NA	Solid	SM 4500 CN I	24526
180-5830-2 MS	B-3(16')-11/10/11	Total/NA	Solid	SM 4500 CN I	24526
180-5830-2 MSD	B-3(16')-11/10/11	Total/NA	Solid	SM 4500 CN I	24526
LCS 240-24526/2-A	Lab Control Sample	Total/NA	Solid	SM 4500 CN I	24526
MB 240-24526/1-A	Method Blank	Total/NA	Solid	SM 4500 CN I	24526
MRL 240-24598/6 MRL	Lab Control Sample	Total/NA	Solid	SM 4500 CN I	

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04 #8

Chain of Custody Record

Testan
THE LEADER IN ENVIRONMENTAL

TestAmerica Laboratory location:
Regulatory program: FGH

☐ DW ☐ NPDES ☐ RCRA ☐ Other

COC No. _____ of _____ COCs

Company Name: GAT CONSULTANTS

Client Project Manager: JOHN BOLANIGER

Address: EMERALD MOUNT DR.

Telephone: 412-884-8763

Site Contact: RAY GLEN

Lab Contact: KATHY BORT

City/State/Zip: HOMESTEAD, PA

Email: J.BOLANIGER@GATCONSULTANTS.COM

Telephone: 412-884-8763

Telephone: 412-884-8763

Phone: 412 476 2000

Method of Shipment/Carrier: DABO OFE

Shipping/Tracking No: 607141813

Project Name: USS CLARITON

Project Number: 607141813

Sample Identification

Sample Date: 11/4/11

Sample Time: 9:00

Sample Date: 11/4/11

Sample Time: 9:30

Matrix: Air

Containers & Preservatives: Filtered Sample (Y/N)

Composite: C / Grab / C

Analyses: PER SCOPE

Sample Specific Notes / Special Instructions: 18008687

Possible Hazard Identification

Special Instructions/OC Requirements & Comments: ANALYSIS PER SCOPE 18008687

Relinquished by: [Signature]

Company: GAT

Date/Time: 11-4-11 11:57

Relinquished by: [Signature]

Company: GAT

Date/Time: 11-4-11 13:00

Relinquished by: [Signature]

Company: GAT

Date/Time: 11-4-11 13:00

Relinquished by: [Signature]

Company: GAT

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180-5679

Chain of Custody Record

2.1 #3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact

Company Name: CAT

Address: E. WATCO FIGHT DR

City/State/Zip: HOMESTEAD, FL

Phone: 412-476-2000

Project Name: USS-CALIFORNIA

Project Number: C071418.13

Client Project Manager: J. H. BALANICZ

Telephone:

Email: J. H. BALANICZ@CALIFORNIA.COM

Method of Shipment/Carrier: DPL

Shipping/Tracking No:

Site Contact: J. H. BALANICZ

Telephone: 412-864-8783

Analysis Turnaround Time (in days):

TAT if different from below:

Containers & Preservatives:

Filtered Sample (Y/N):

Composites (Y/Grab):

Lab Contact: KATHY ROBERT

Telephone:

Analyses:

For use only:

Wait-in client:

Lab pickup:

Lab return:

COCS:

COC No:

1 of 1 COCs

Sample Specific Notes / Special Instructions:

PER SCOPE 18008687

SOIL

SOIL

SOIL NO. 5018

SOIL NO. 5018

WATER

WATER

WATER

WATER

WATER

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WATER

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Special Instructions/OC Requirements & Comments:

PER SCOPE 18008687

Relinquished by: J. H. BALANICZ

Relinquished by: J. H. BALANICZ

Relinquished by: J. H. BALANICZ

Relinquished by: J. H. BALANICZ

Relinquished by: J. H. BALANICZ

Relinquished by: J. H. BALANICZ

TAL-0018 (1008)

Login Sample Receipt Checklist

Client: GAI Consultants

Job Number: 180-5526-1

Login Number: 5526

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GAI Consultants

Job Number: 180-5526-1

Login Number: 5526

List Source: TestAmerica North Canton

List Number: 1

List Creation: 11/05/11 01:00 PM

Creator: Ferrel, Matthew

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> pH	<u>Preservative</u> Added (mls)	<u>Lot #</u>
B-4 (6')-11-7-11	180-5679-A-1	Clear Glass 8oz Wide -	_____	_____	_____
B-4 (6')-11-7-11	180-5679-B-1	Clear Glass 8oz Wide -	_____	_____	_____
B-4 (6')-11-7-11	180-5679-C-1	Clear Glass 4oz Wide -	_____	_____	_____
B-4 (6')-11-7-11	180-5679-D-1	VOA Terracore Kit - Greenwood	_____	_____	_____
B-4 (6')-11-7-11	180-5679-E-1	VOA Terracore Kit - Greenwood	_____	_____	_____
B-4 (6')-11-7-11	180-5679-F-1	VOA Terracore Kit - Greenwood	_____	_____	_____
B-4 (16')-11-7-11	180-5679-A-2	Clear Glass 8oz Wide -	_____	_____	_____
B-4 (16')-11-7-11	180-5679-B-2	Clear Glass 8oz Wide -	_____	_____	_____
B-4 (16')-11-7-11	180-5679-C-2	Clear Glass 4oz Wide -	_____	_____	_____
B-4 (16')-11-7-11	180-5679-D-2	VOA Terracore Kit - Greenwood	_____	_____	_____
B-4 (16')-11-7-11	180-5679-E-2	VOA Terracore Kit - Greenwood	_____	_____	_____
B-4 (16')-11-7-11	180-5679-F-2	VOA Terracore Kit - Greenwood	_____	_____	_____
B-6 (6')-11-7-11	180-5679-A-3	Clear Glass 8oz Wide -	_____	_____	_____
B-6 (6')-11-7-11	180-5679-B-3	Clear Glass 8oz Wide -	_____	_____	_____
B-6 (6')-11-7-11	180-5679-C-3	Clear Glass 4oz Wide -	_____	_____	_____
B-6 (6')-11-7-11	180-5679-D-3	VOA Terracore Kit - Greenwood	_____	_____	_____
B-6 (6')-11-7-11	180-5679-E-3	VOA Terracore Kit - Greenwood	_____	_____	_____
B-6 (6')-11-7-11	180-5679-F-3	VOA Terracore Kit - Greenwood	_____	_____	_____
B-5W-11-8-11	180-5679-A-4	Amber Glass 1 liter - unpreserved	_____	_____	_____
B-5W-11-8-11	180-5679-B-4	Amber Glass 1 liter - unpreserved	_____	_____	_____
B-5W-11-8-11	180-5679-C-4	Amber Glass 1 liter - Hydrochloric	?	_____	_____
B-5W-11-8-11	180-5679-D-4	Amber Glass 1 liter - Hydrochloric	?	_____	_____
B-5W-11-8-11	180-5679-E-4	Plastic 500ml - with Nitric Acid	?	_____	_____
B-5W-11-8-11	180-5679-F-4	Plastic 250ml - with Sodium	13	_____	_____
B-5W-11-8-11	180-5679-G-4	Plastic 250ml - with Sulfuric Acid	?	_____	_____
B-5W-11-8-11	180-5679-H-4	Plastic 250ml - unpreserved	_____	_____	_____
B-5W-11-8-11	180-5679-I-4	Plastic 250ml - unpreserved	_____	_____	_____
B-5W-11-8-11	180-5679-J-4	Voa Vial 40ml - Hydrochloric Acid	P	_____	_____
B-5W-11-8-11	180-5679-K-4	Voa Vial 40ml - Hydrochloric Acid	J	_____	_____
B-5W-11-8-11	180-5679-L-4	Voa Vial 40ml - Hydrochloric Acid	J	_____	_____
B-4W-11-8-11	180-5679-A-5	Amber Glass 1 liter - unpreserved	_____	_____	_____
B-4W-11-8-11	180-5679-B-5	Amber Glass 1 liter - unpreserved	_____	_____	_____
B-4W-11-8-11	180-5679-C-5	Amber Glass 1 liter - Hydrochloric	?	_____	_____
B-4W-11-8-11	180-5679-D-5	Amber Glass 1 liter - Hydrochloric	?	_____	_____
B-4W-11-8-11	180-5679-E-5	Plastic 500ml - with Nitric Acid	?	_____	_____
B-4W-11-8-11	180-5679-F-5	Plastic 250ml - with Sodium	13	_____	_____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservative</u> <u>Added (mls)</u>	<u>Lot #</u>
B-4W-11-8-11	180-5679-G-5	Plastic 250ml - with Sulfuric Acid	2		
B-4W-11-8-11	180-5679-H-5	Plastic 250ml - unpreserved			
B-4W-11-8-11	180-5679-I-5	Plastic 250ml - unpreserved			
B-4W-11-8-11	180-5679-J-5	Voa Vial 40ml - Hydrochloric Acid	2		
B-4W-11-8-11	180-5679-K-5	Voa Vial 40ml - Hydrochloric Acid	↓		
B-4W-11-8-11	180-5679-L-5	Voa Vial 40ml - Hydrochloric Acid	↓		

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservative</u> <u>Added (mls)</u>	<u>Lot #</u>
B-2W-11-9-11	180-5712-A-1	Amber Glass 1 liter - unpreserved	_____	_____	_____
B-2W-11-9-11	180-5712-B-1	Amber Glass 1 liter - unpreserved	_____	_____	_____
B-2W-11-9-11	180-5712-C-1	Amber Glass 1 liter - Hydrochloric	2	_____	_____
B-2W-11-9-11	180-5712-D-1	Amber Glass 1 liter - Hydrochloric	2	_____	_____
B-2W-11-9-11	180-5712-E-1	Plastic 500ml - with Nitric Acid	2	_____	_____
B-2W-11-9-11	180-5712-F-1	Plastic 250ml - with Sodium	13	_____	_____
B-2W-11-9-11	180-5712-G-1	Plastic 250ml - with Sulfuric Acid	2	_____	_____
B-2W-11-9-11	180-5712-H-1	Plastic 250ml - unpreserved	_____	_____	_____
B-2W-11-9-11	180-5712-I-1	Plastic 250ml - unpreserved	_____	_____	_____
B-2W-11-9-11	180-5712-J-1	Voa Vial 40ml - Hydrochloric Acid	0	_____	_____
B-2W-11-9-11	180-5712-K-1	Voa Vial 40ml - Hydrochloric Acid	↓	_____	_____
B-2W-11-9-11	180-5712-L-1	Voa Vial 40ml - Hydrochloric Acid	↓	_____	_____
B-1W-11-9-11	180-5712-A-2	Amber Glass 1 liter - unpreserved	_____	_____	_____
B-1W-11-9-11	180-5712-B-2	Amber Glass 1 liter - unpreserved	_____	_____	_____
B-1W-11-9-11	180-5712-C-2	Amber Glass 1 liter - Hydrochloric	2	_____	_____
B-1W-11-9-11	180-5712-D-2	Amber Glass 1 liter - Hydrochloric	2	_____	_____
B-1W-11-9-11	180-5712-E-2	Plastic 500ml - with Nitric Acid	2	_____	_____
B-1W-11-9-11	180-5712-F-2	Plastic 250ml - with Sodium	13	_____	_____
B-1W-11-9-11	180-5712-G-2	Plastic 250ml - with Sulfuric Acid	2	_____	_____
B-1W-11-9-11	180-5712-H-2	Plastic 250ml - unpreserved	_____	_____	_____
B-1W-11-9-11	180-5712-I-2	Plastic 250ml - unpreserved	_____	_____	_____
B-1W-11-9-11	180-5712-J-2	Voa Vial 40ml - Hydrochloric Acid	0	_____	_____
B-1W-11-9-11	180-5712-K-2	Voa Vial 40ml - Hydrochloric Acid	↓	_____	_____
B-1W-11-9-11	180-5712-L-2	Voa Vial 40ml - Hydrochloric Acid	↓	_____	_____

APPENDIX D
GEOTECHNICAL LABORATORY TEST RESULTS

pH OF SOILS
 ASTM D 4972-01
 (SOP- S36)

Client GAI CONSULTANTS
 Client Reference USS CLAIRTON C071418.13
 Project No. 2011-532-01

Lab ID	01	02	03	04	05
Boring No.	B-1	B-3	B-3	B-5	B-5
Depth (ft)	0-26.5	0-26.5	30-46.5	20.0-36.5	20.0-36.5
Sample No.	S-1,3,5,6	S-1,3,4,5,6	S-7,8,9,10	S-5,6,7,8	S-9,10,11
Drying Tare No.	PH11	PH8	PH9	PH10	PH11
Testing Tare No.	B	J	A	E	C
Temperature (°C)	22	22	22	22	22
pH of Sample					
Test 1	9.5	9.8	10.4	10.4	8.5
Test 2	9.5	9.8	10.4	10.4	8.5
Agreement (+/- 0.2 units)	0.0	0.0	0.0	0.0	0.0

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	3.98	ORION 720A
7.00	6.99	
10.0	10.00	

pH of Distilled Water (Acceptable range 6.5-7.5)	6.8
---	-----

Tested By KBL Date 12/7/11 Checked By *KC* Date 12-8-11

page 1 of 1 DCN: CT-S36 DATE 2/25/10 REVISION: 4 C:\Users\Geojack\Documents\PRINT Q (LOCAL)\G403.xls\Sheet1

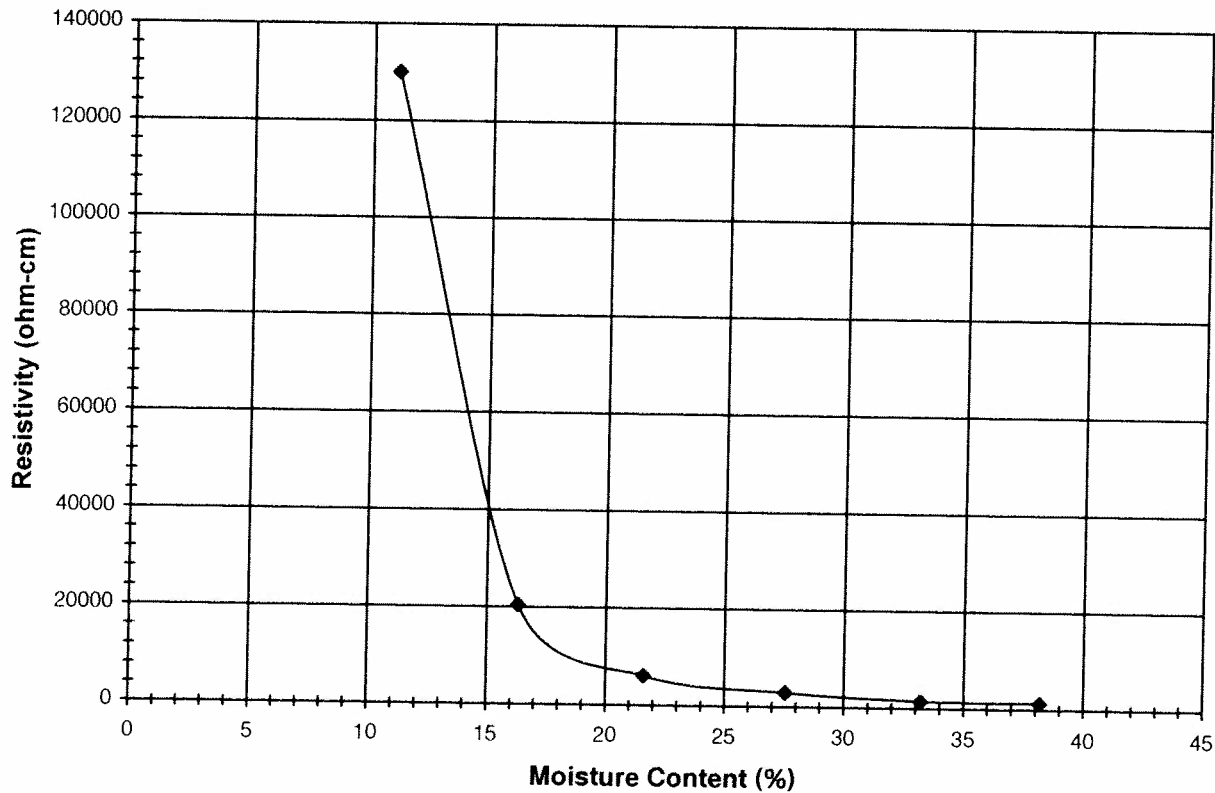
Minimum Resistivity
AASHTO T288-01 (SOP - S56)



Client	GAI CONSULTANTS	Boring No.	B-1
Client Reference	USS CLAIRTON C071418.13	Depth (ft)	0-26.5
Project No.	2011-532-01	Sample No.	S-1,3,5,6
Lab ID	2011-532-01-01	Visual Description	GRAY SAND (- #10 Sieve material)

Tare No.	52	63	35	61	43	44
Tare & Wet Specimen (gm)	39.65	37.10	35.46	33.67	40.71	47.42
Tare & Dry Specimen (gm)	36.68	33.33	30.88	27.97	33.02	36.55
Tare Weight (gm)	9.79	10.22	9.67	7.28	9.86	8.08
Moisture Content (%)	11.0	16.3	21.6	27.5	33.2	38.2 (Saturated)
Resistance (ohm)	130000	20500	6150	3000	1500	1350
Resistivity (ohm-cm)	130000	20500	6150	3000	1500	1350

Note: The ratio of Miller Box area versus distance between electrodes is equal to 1.



Soil Class	Corrosion Resistance	Specific Resistivity (ohm-cm)
1	Excellent	10,000 - 6,000
2	Good	6,000 - 4,500
3	Fair	4,500 - 2,000
4	Bad	2,000 - 0

Tested By PC Date 12/2/11 Checked By KC Date 12-5-11

DCN: CT-S56

DATE: 4/29/04

REVISION: 1

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Minimum Resistivity

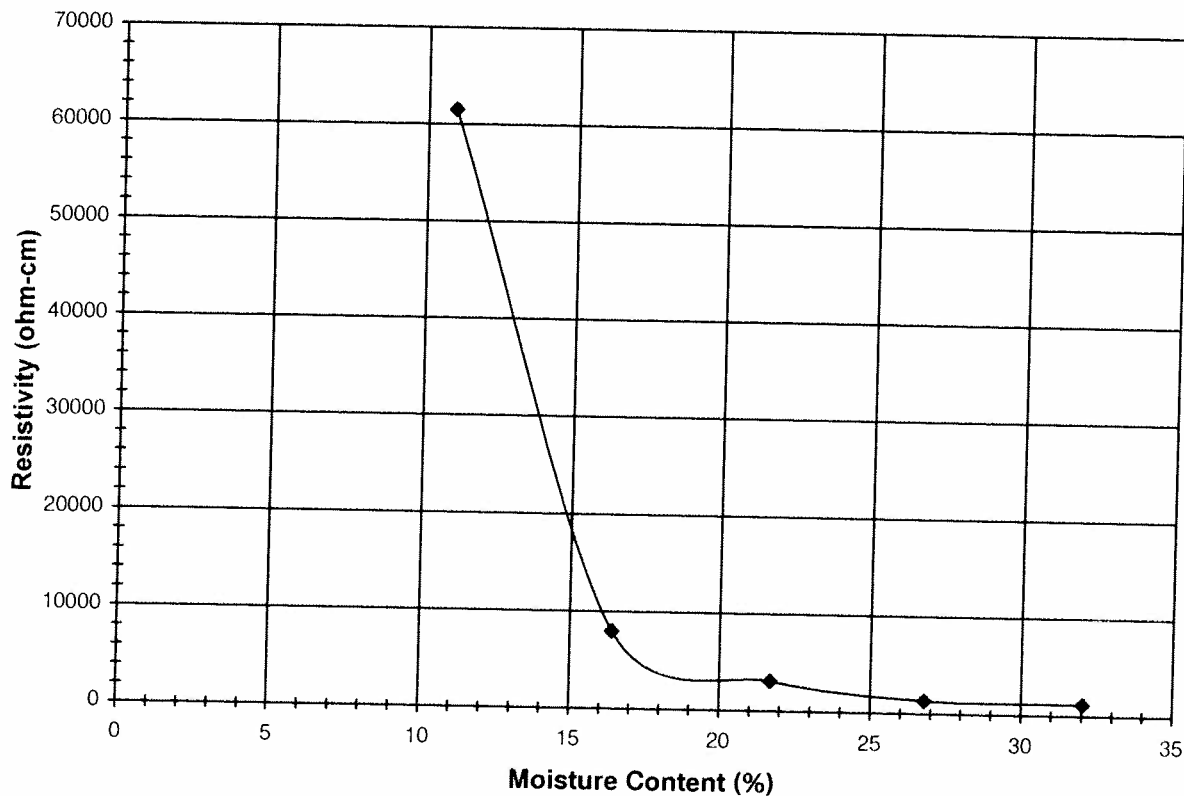
AASHTO T288-01 (SOP - S56)



Client	GAI CONSULTANTS	Boring No.	B-3
Client Reference	USS CLAIRTON C071418.13	Depth (ft)	0-26.5
Project No.	2011-532-01	Sample No.	S-1,3,4,5,6
Lab ID	2011-532-01-02	Visual Description	GRAY SAND
			(- #10 Sieve material)

Tare No.	38	64	60	47	40
Tare & Wet Specimen (gm)	35.14	37.33	37.75	46.36	38.23
Tare & Dry Specimen (gm)	32.37	33.44	32.31	38.60	30.66
Tare Weight (gm)	6.99	9.71	7.22	9.62	7.03
Moisture Content (%)	10.9	16.4	21.7	26.8	32.0 (Saturated)
Resistance (ohm)	61500	8000	3100	1350	1200
Resistivity (ohm-cm)	61500	8000	3100	1350	1200

Note: The ratio of Miller Box area versus distance between electrodes is equal to 1.



Soil Class	Corrosion Resistance	Specific Resistivity (ohm-cm)
1	Excellent	10,000 - 6,000
2	Good	6,000 - 4,500
3	Fair	4,500 - 2,000
4	Bad	2,000 - 0

Tested By PC Date 12/2/11 Checked By KC Date 12-5-11

DCN: CT-S56

DATE: 4/29/04

REVISION: 1

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Minimum Resistivity

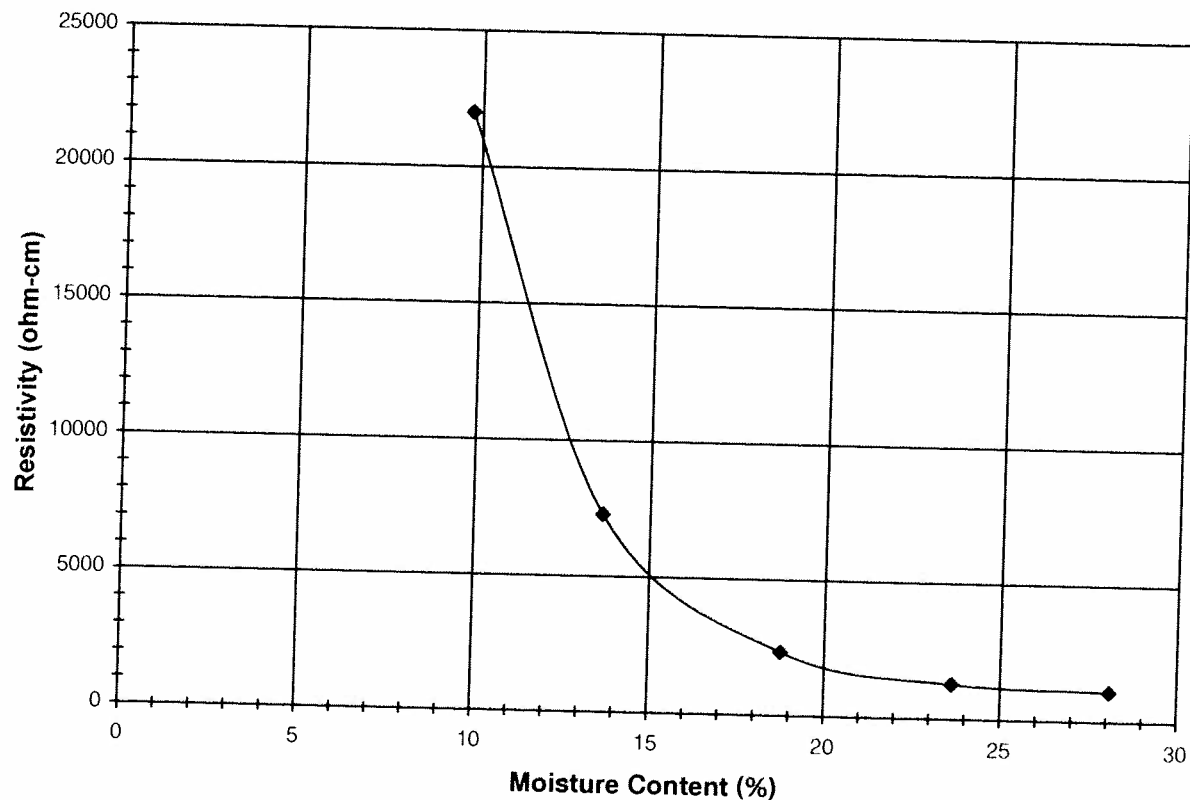
AASHTO T288-01 (SOP - S56)



Client	GAI CONSULTANTS	Boring No.	B-3
Client Reference	USS CLAIRTON C071418.13	Depth (ft)	30.0-46.5
Project No.	2011-532-01	Sample No.	S-7,8,9,10
Lab ID	2011-532-01-03	Visual Description	GRAY SILTY SAND (- #10 Sieve material)

Tare No.	38	47	60	64	40
Tare & Wet Specimen (gm)	30.91	32.77	29.27	40.07	37.52
Tare & Dry Specimen (gm)	28.79	29.99	25.79	34.27	30.85
Tare Weight (gm)	7.00	9.63	7.23	9.72	7.10
Moisture Content (%)	9.7	13.7	18.8	23.6	28.1 (Saturated)
Resistance (ohm)	22000	7300	2350	1300	1100
Resistivity (ohm-cm)	22000	7300	2350	1300	1100

Note: The ratio of Miller Box area versus distance between electrodes is equal to 1.



Soil Class	Corrosion Resistance	Specific Resistivity (ohm-cm)
1	Excellent	10,000 - 6,000
2	Good	6,000 - 4,500
3	Fair	4,500 - 2,000
4	Bad	2,000 - 0

Tested By KBL Date 12/7/11 Checked By *KL* Date 12-8-11

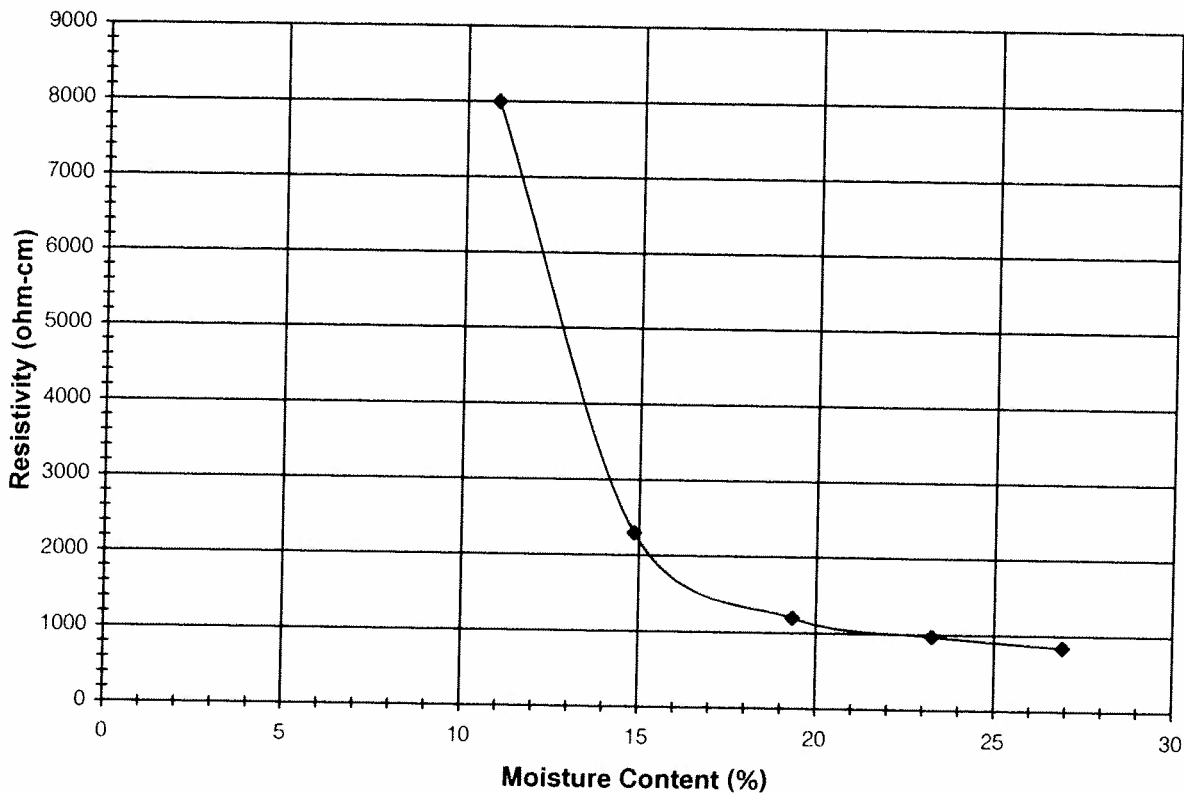
Minimum Resistivity
AASHTO T288-01 (SOP - S56)



Client	GAI CONSULTANTS	Boring No.	B-5
Client Reference	USS CLAIRTON C071418.13	Depth (ft)	20.0-36.5
Project No.	2011-532-01	Sample No.	S-5,6,7,8
Lab ID	2011-532-01-04	Visual Description	BROWN SAND (- #10 Sieve material)

Tare No.	35	49	61	44	42
Tare & Wet Specimen (gm)	29.68	30.52	32.44	36.80	39.07
Tare & Dry Specimen (gm)	27.72	27.82	28.36	31.39	32.29
Tare Weight (gm)	9.70	9.65	7.28	8.13	7.10
Moisture Content (%)	10.9	14.9	19.3	23.3	26.9 (Saturated)
Resistance (ohm)	8000	2300	1200	975	840
Resistivity (ohm-cm)	8000	2300	1200	975	840

Note: The ratio of Miller Box area versus distance between electrodes is equal to 1.



Soil Class	Corrosion Resistance	Specific Resistivity (ohm-cm)
1	Excellent	10,000 - 6,000
2	Good	6,000 - 4,500
3	Fair	4,500 - 2,000
4	Bad	2,000 - 0

Tested By KBL Date 12/7/11 Checked By KC Date 12-8-11

DCN: CT-S56

DATE: 4/29/04

REVISION: 1

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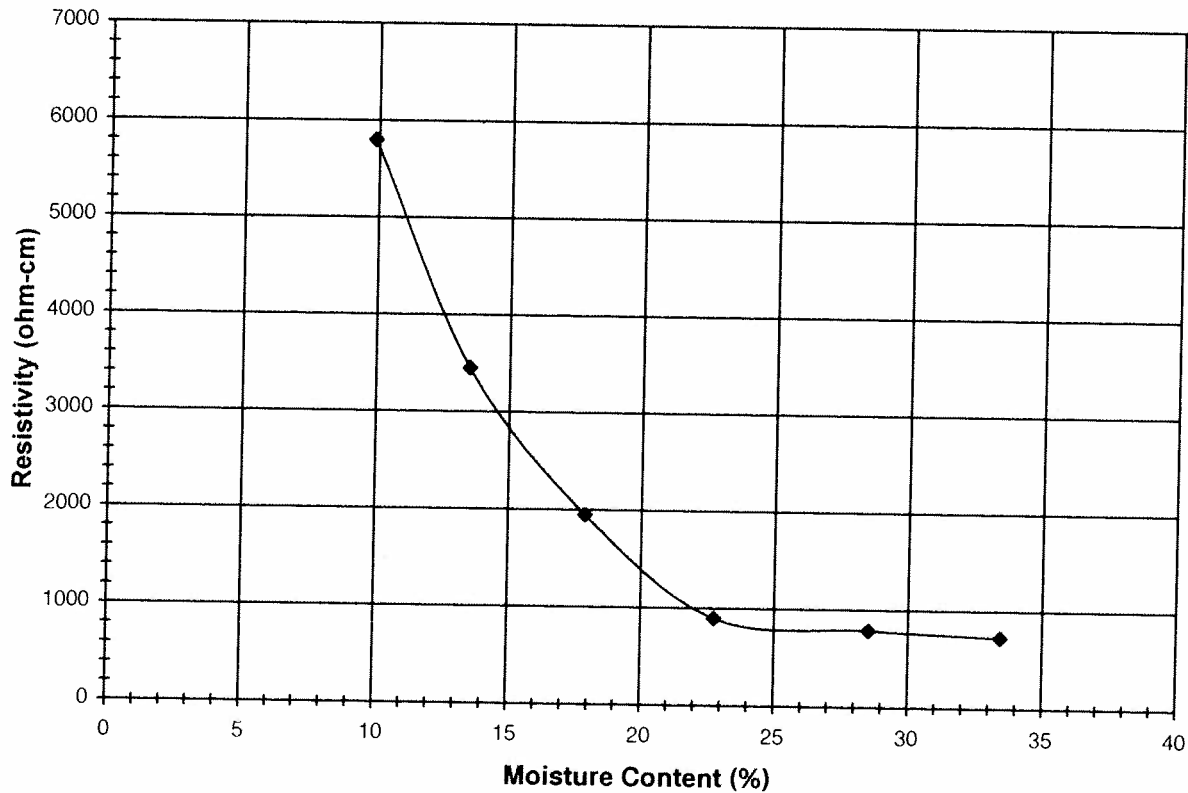
Minimum Resistivity
AASHTO T288-01 (SOP - S56)



Client	GAI CONSULTANTS	Boring No.	B-5
Client Reference	USS CLAIRTON C071418.13	Depth (ft)	20.0-36.5
Project No.	2011-532-01	Sample No.	S-9,10,11
Lab ID	2011-532-01-05	Visual Description	BROWN CLAY (- #10 Sieve material)

Tare No.	52	63	62	65	54	48
Tare & Wet Specimen (gm)	29.91	31.64	31.80	31.23	31.32	33.48
Tare & Dry Specimen (gm)	28.10	29.09	28.49	27.30	26.58	27.62
Tare Weight (gm)	9.78	10.20	9.97	10.02	9.96	10.09
Moisture Content (%)	9.9	13.5	17.9	22.7	28.5	33.4
Resistance (ohm)	5800	3450	1950	900	790	730
Resistivity (ohm-cm)	5800	3450	1950	900	790	730

Note: The ratio of Miller Box area versus distance between electrodes is equal to 1.



Soil Class	Corrosion Resistance	Specific Resistivity (ohm-cm)
1	Excellent	10,000 - 6,000
2	Good	6,000 - 4,500
3	Fair	4,500 - 2,000
4	Bad	2,000 - 0

Tested By	KBL	Date	12/7/11	Checked By	KC	Date	12-8-11
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DCN: CT-S56

DATE: 4/29/04

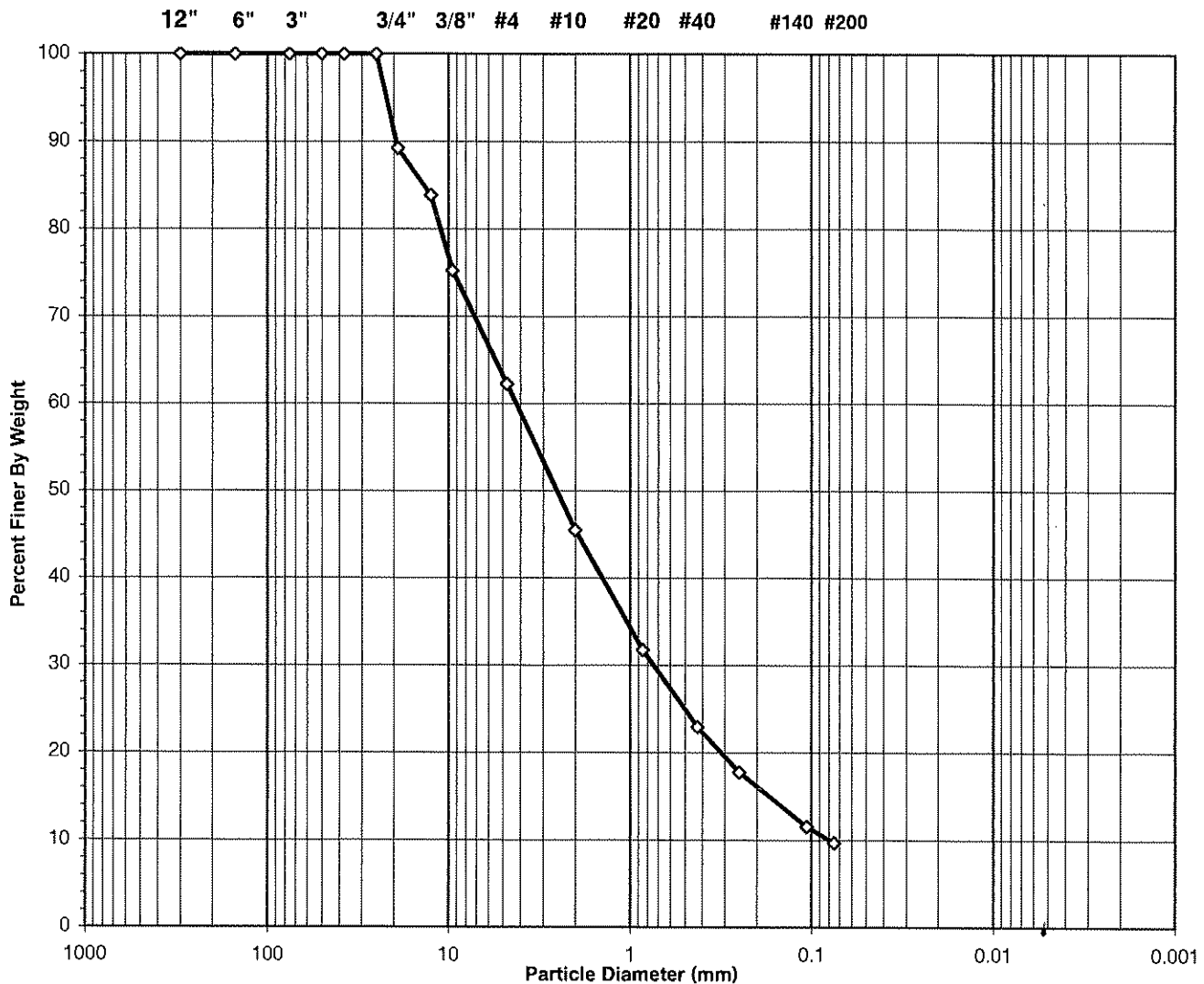
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SIEVE ANALYSIS
ASTM D 422-63 (2007) SOP-S3

Client	GAI CONSULTANTS	Boring No.	B-2
Client Reference	USS CLAIRTON C071418.13	Depth (ft)	10.0-20.6
Project No.	2011-532-02	Sample No.	S-3,5
Lab ID	2011-532-02-01	Soil Color	GRAY

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol *sw-sm, ASSUMED* **D60 = 4.23** **CC = 1.64**

USCS Classification *WELL-GRADED SAND WITH SILT AND GRAVEL* **D30 = 0.74** **CU = 53.15**

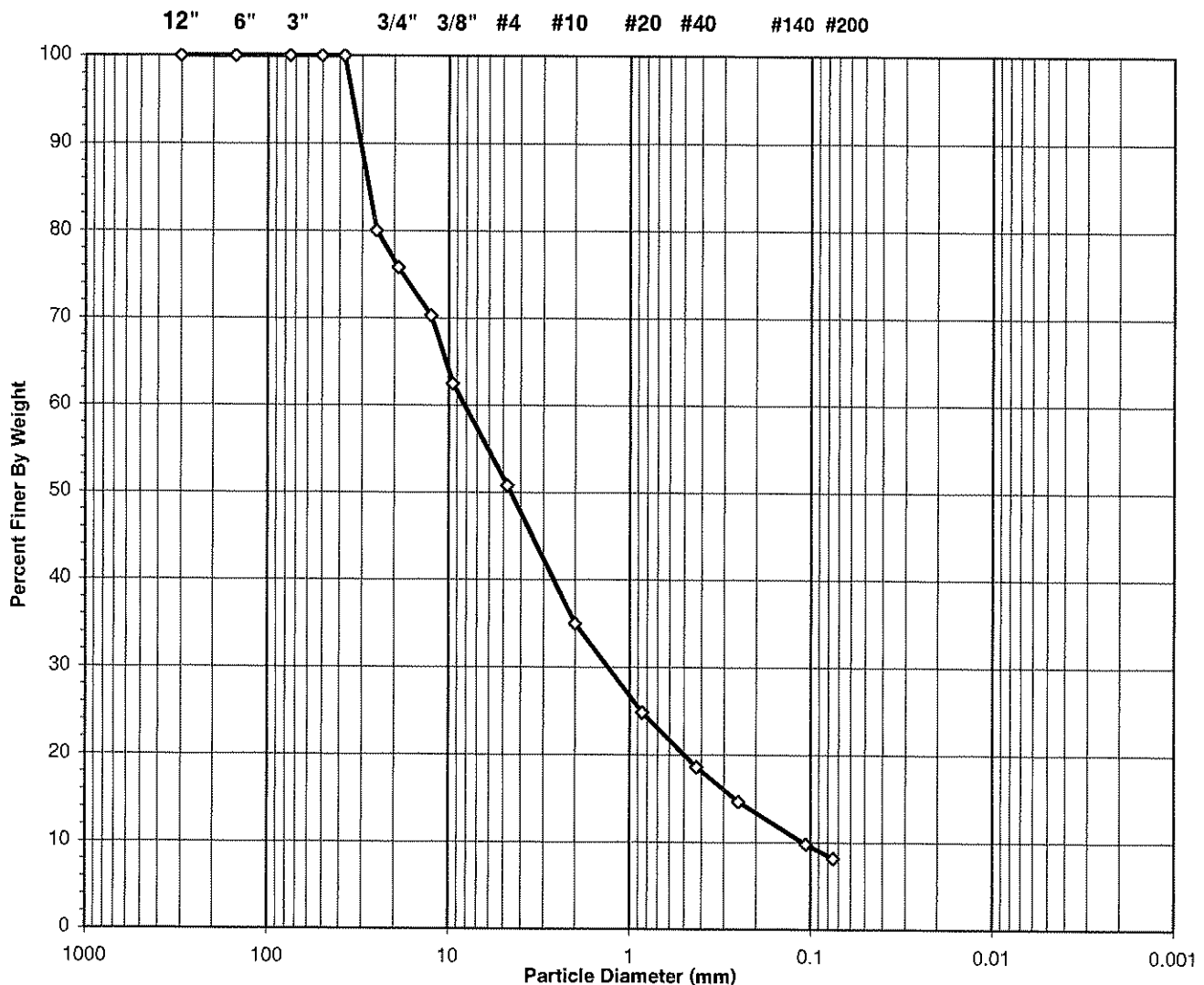
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Tested By **BHK** Date **12/12/11** Checked By **KC** Date **12-12-11**

SIEVE ANALYSIS
ASTM D 422-63 (2007) SOP-S3

Client	GAI CONSULTANTS	Boring No.	B-4
Client Reference	USS CLAIRTON C071418.13	Depth (ft)	10.0-20.2
Project No.	2011-532-02	Sample No.	S-3,5
Lab ID	2011-532-02-02	Soil Color	GRAY

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol	gw-gm, ASSUMED	D60 = 8.19	CC = 1.93
USCS Classification	WELL-GRADED GRAVEL WITH SILT AND SAND	D30 = 1.32	CU = 74.49
		D10 = 0.11	

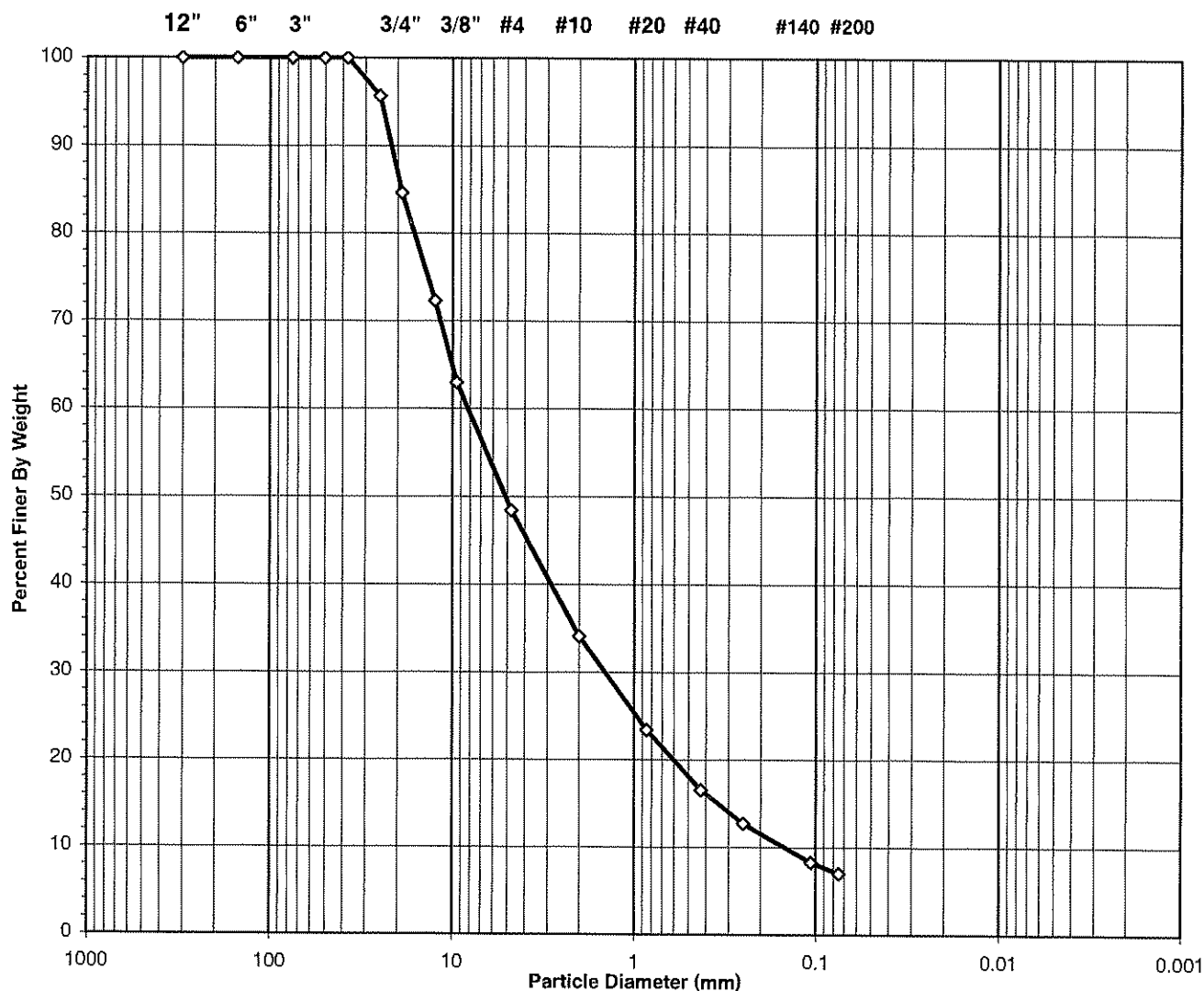
Tested By	BHK	Date	12/12/11	Checked By	<i>[Signature]</i>	Date	12-12-11
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SIEVE ANALYSIS ASTM D 422-63 (2007) SOP-S3

Client GAI CONSULTANTS
 Client Reference USS CLAIRTON C071418.13
 Project No. 2011-532-02
 Lab ID 2011-532-02-03

Boring No. B-6
 Depth (ft) 0-11.5
 Sample No. S-1,2,3
 Soil Color **BROWN / GRAY**

USCS	SIEVE ANALYSIS		HYDROMETER
	gravel	sand	silt and clay



USCS Symbol *gw-gm, ASSUMED*

D60 = 8.24 CC = 1.70

USCS Classification *WELL-GRADED GRAVEL WITH SILT AND SAND*

D30 = 1.44 CU = 55.74

D10 = 0.15

Tested By BHK

Date 12/12/11

Checked By *hc*

Date *12-12-11*

Geotechnics, Inc. (PA)

Geotechnics, Inc.

544 Bradock Avenue

East Pittsburgh, PA 15112

Customer Code: 1300 - 0001

Attention: James Moyer

Work Req By: Kevin Lichtenfels

Customer P.O.:

Phone:

(412) 823-7600

Fax:

(412) 823-8999

Email:

klichtenfels@geotechnics.net

Loc:

GAI Consultants

Date Recd: 12/08/11

Project Number: USS CLAIRTON C071418.13

Sample Id:

000349132

Client Sample Id: B-1, 0-26.5', S-1,3,5,6

Sampled Location: 2011-523-01-01

Sampling Date: 12/07/11

Results

Total

Analyte

Method

Analysis An.
Date

Init. Reporting Limit

Chloride

Cal 422

12/15/11 JAD

50 mg/kg

Comments:
150 ppm

Sulfate

Cal 417

12/15/11 JAD

50 mg/kg

Comments:
400 ppm

Sulfate

Cal 417

12/15/11 JAD

50 mg/kg

Comments:
400 ppm

150 mg/kg

400 mg/kg

Sample Id:

000349133

Client Sample Id: B-3, 0-26.5', S-1,3,4,5,6

Sampled Location: 2011-523-01-02

Sampling Date: 12/07/11

Results

Total

Analyte

Method

Analysis An.
Date

Init. Reporting Limit

Chloride

Cal 422

12/15/11 JAD

50 mg/kg

Sulfate

Cal 417

12/15/11 JAD

50 mg/kg

Comments:
85 ppm

Sulfate

Cal 417

12/15/11 JAD

50 mg/kg

Comments:
460 ppm

85 mg/kg

460 mg/kg

Sample Id: **000349134** Client Sample Id: **B-3, 30.0-46.5', S-7,8,9,10** Sampling Date: 12/07/11
Sampled Location: **2011-523-01-03**

				Results
Analyte	Method	Analysis An. Date	Init. Reporting Limit	Total
Chloride	Cal 422	12/15/11 JAD	50 mg/kg	51
				Comments: 51 ppm
Sulfate	Cal 417	12/15/11 JAD	50 mg/kg	240
				Comments: 240 ppm

Sample Id: **000349135** Client Sample Id: **B-5, 20.0-36.5', S-5,6,7,8** Sampling Date: 12/07/11
Sampled Location: **2011-523-01-04**

				Results	
Analyte	Method	Analysis An. Date	Init. Reporting Limit	Total	
Chloride	Cal 422	12/15/11	JAD	50 mg/kg	< 50 mg/kg
				Comments: <50 ppm	
Sulfate	Cal 417	12/15/11	JAD	50 mg/kg	1200 mg/kg
				Comments: 1200 ppm	

Sample Id: **000349136** Client Sample Id: **B-5, 20.0-36.5', S-9,10,11** Sampling Date: 12/07/11
Sampled Location: **2011-523-01-05**

				Results	
Analyte	Method	Analysis An. Date	Init. Reporting Limit	Total	
Chloride	Cal 422	12/15/11 JAD	50 mg/kg	200 mg/kg	
				Comments:	200 ppm
Sulfate	Cal 417	12/15/11 JAD	50 mg/kg	370 mg/kg	
				Comments:	370 ppm

NOTE: Sample sets with a supplied Field Blank have been blank corrected unless otherwise noted.

12/19/2011 17:39:20

Tracking Sheet: 46932

Analyst: _____ Date: 12/16/11
Jody Delbusso - General Chemistry

Time, flow rate, and/or sample volume data are based on client supplied information, unless otherwise noted. All analytical quality control results for this tracking sheet met laboratory QC guidelines unless stated otherwise above.

Approved: _____ Date: 12/19/11
Rachelle Hergenroeder - Project Coordinator

*** END OF REPORT ***

APPENDIX E
SPECIFICATIONS FOR AUGERCAST PILES

1.0 AUGERCAST PILES – 18-INCH DIAMETER

This work consists of supplying the necessary labor, materials, tools, and equipment and properly installing the augercast piles as required by the Drawings and the Contract Specifications.

1.1 Definitions

1.1.1 An augercast pile shall consist of augering to rock using a continuous-flight, hollow-stem auger and filling the hole with grout as the auger is being withdrawn. Reinforcement shall be included as indicated on the drawings for lateral loads, to transmit the superstructure load to the pile, and/or for pile continuity.

1.1.2 Individual Pile Design Capacities:

- 1.1.2.1 Compression – 210 tons
- 1.1.2.2 Tension – 22 tons (with full length #10 grade 60 all-thread bar)
- 1.1.2.3 Lateral – 4 tons (with full length #10 grade 60 all-thread bar)
- 1.1.2.4 Lateral – 8 tons (with full length #10 grade 60 all-thread bar and 15-foot deep reinforcing cage consisting of 6 #8 grade 60 rebar with #4 ties at 12-inch centers)

1.2 Qualifications

Installation of the augercast piles shall be performed by a specialty contractor whose qualifications and experience in work of this type and scope, suitability or equipment, competent personnel and reputation shall be subject to the approval of the Owner or his designated representative. As a minimum, the contractor shall submit evidence of successful completion of at least five augercast pile installations and testing comparable in scope of this project. The onsite construction superintendent and pile installation rig operator shall also meet this requirement.

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1.3 Standards

All work performed under this section shall conform to generally accepted engineering and construction practices. Testing procedures specified herein shall be the current applicable standards.

Installation

- 1.3.1 The hollow stem auger used to install these piles shall be a continuous shaft with the minimum length needed to penetrate ten feet below the lowest anticipated top of rock elevation. The entire augered hole shall be a minimum of 18 inches in diameter. Advance the auger with a temporary plug at the tip at a continuous rate that prevents removal of excessive soil. The installation of these piles shall be conducted in such a manner as to not destabilize nearby foundations, or structures or damage underground utilities identified on the Drawings. The hole shall be augered to the elevation of the top rock and then until auger refusal (less than 1 foot of penetration per minute) is achieved with a drill rig delivering greater than 20,000 foot-pounds of torque with full weight of tools.
- 1.3.2 The augered hole shall be filled to the top of pile elevation as shown on the Contract Drawings through the hollow-stem with grout pumped with a positive pressure. The pump shall have the capability of delivering at least 300 psi pressure at the gage. The pressure gauge shall be accurate to a precision of $\pm 10\%$ of the pressure being measured. The grout pump shall be a positive displacement pump, shall have a method of determining the volume of grout being pumped, and shall be calibrated. Positive pressure shall always be maintained by pumping grout while the augers are being withdrawn.
- 1.3.3 The rate of withdrawal of the augers shall be such that the volume of the augered hole below the auger tip shall always be equal to or less than the amount of grout below the auger tip. The rate of pumping of grout into the hole shall always exceed the rate of volume increase of the hole as the auger is withdrawn. The minimum volume of grout placed in the augered hole shall be at least 115 percent of the volume of the augered hole.
- 1.3.4 The steel reinforcing bars shall be installed as shown on the Drawings. The top of the bar shall be centered in the top of the pile immediately after placement of the bar. Any connections required

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to join lengths of bars within the pile shall be made in the lower half of the pile with connections which will develop the full tensile strength of the bar. Connection details shall permit proper construction of the piles and shall be subject to the approval of the Owner's Representative. Use suitable centralizers to assure alignment.

- 1.3.5 Piles shall not be installed closer than 9 feet on centers from existing piles until the grout in the existing piles has reached its initial set (minimum 10 hours), so that there will not be interconnection between adjacent piles while the mortar is in a fluid state.
- 1.3.6 Piles shall be constructed to the correct top elevation as shown on the Drawings. Depending on the elevation of the ground surface at the time of construction, this may require proper removal of excess grout from auger holes or sleeves to extend the pile tops above the surrounding ground.
- 1.3.7 If near surface obstructions are encountered in fill that cannot be penetrated by the auger, the pile shall either be relocated or the obstruction shall be exposed and removed as directed by the Owner's Representative. The cost of removing obstructions by excavating is not included in the unit price for piling.
- 1.3.8 If directed by the Owner's Representative, obstructions including remaining reinforced concrete foundations or steel shall be penetrated by pre-drilling. The cost of pre-drilling through obstructions shall be paid according to the unit price for "drilling of obstructions."
- 1.3.9 The installation equipment shall be equipped with an automatic pile installation recorder to provide continuous records of the grouting installation rates and pressures and the auger withdrawal rates. This equipment shall be used to provide a continuous record of each pile installed and to detect anomalies in the piles before the grout has set.
- 1.3.10 The piling shall be constructed under continuous observation of the Contractor and the Owner's Representative. If a defect in pile continuity is detected during grout placement, the augers shall be lowered sufficiently to restore continuity and the grout injection process continued to completion.

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1.4 Materials

1.4.1 Grout

- a. The grout for the augercast piles shall be proportioned to obtain an unconfined compressive strength of at least 5000 psi at 28 days cure when tested according to ASTM Test Designation C-109. Prior to the start of construction, the Contractor shall submit the results of the batch tests of the grout design mix to the Owner's Representative. The results shall include the mix components and proportions, the flow cone requirements, and the 7-, 14-, and 28-day strengths. The Contractor shall perform all grout design testing.
- b. The Portland cement for the grout shall meet the requirements of ASTM C-150, Type II.
- c. Water shall be fresh, clean, and potable.
- d. Fine aggregate shall hard, durable, chemically inert natural sand containing no deleterious materials that meets the requirements of PennDOT Type A concrete sand.
- e. The fluidifier shall increase the flowability of the mixture, disperse cement grains, neutralize grout shrinkage, hold solids in suspension, increase pumpability of the grout, reduce bleeding, reduce the water requirements, thereby increasing the compressive strength by 20% minimum.
- f. The Owner's Representative shall prepare and test at least eight 2-inch by 2-inch cubes for each 50 cubic yards of grout and at least once for each day's production. Two samples shall be tested by the Owner's Representative at 7- days cure, 2 at 14-days, 2 at 28- days and 2 for spares.
- g. The flow cone measurement for every truck or batch of grout shall be measured at the site in accordance to with the COE Test Designation CRD C79 with a $\frac{3}{4}$ inch opening. The flow cone values shall be consistent with the requirements of the design mix. No water shall be added to the mix after the flow cone test has been taken. In addition, the final water-cement ratio shall not exceed that of the design mix.

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- h. The temperature of the grout shall not exceed 90° F at the time of placement. Provide cold weather protection and curing of the completed piling in accordance with ACI requirements, when necessary.
- i. Each truck ticket shall be submitted to the Owner's Representative prior to placement.

1.4.2 The reinforcing steel for cages shall conform to ASTM Specification A-615 Grade 60, unless otherwise indicated on the Drawings. All piles shall have a central full-length #10 grade 60 all-thread rebar meeting the requirements of ASTM A-615. The top connection details for all piles shall be as shown on the drawings. Threaded couplers designed by the manufacturer to transmit the full strength of the bar shall be used, if needed for the all-thread bars. All reinforcing in the augercast piles shall be epoxy coated in accordance with ASTM A-775.

1.5 Tolerance

The augercast piles shall be installed within 3 inches of plan position. Variation from plumb or specified batter angle shall not exceed 2 percent. Top of pile elevation shall be within one inch of that shown on the Drawings.

1.6 Records

A complete and accurate record of all augercast piles shall be maintained by the Contractor. The record shall reference number, dates, of activities, diameter, length, elevation of tip, incremental and total volume of grout, grouting pressures, samples prepared and results of all grout tests. The contractor shall supply copies to the owner's representative of the electronic data records of each pile installed.

1.7 Pile Load Tests, Where Indicated on Drawings

- 1.7.1 All pile static load tests shall be conducted to test loads equal to at least twice the design loads.
- 1.7.2 The piles used for the testing shall be non-production piles.
- 1.7.3 The contractor shall provide sketches of the proposed test setups and the recent calibrations of the hydraulic rams and load cells for

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acceptance by the owner's representative at least two weeks prior to installing the test setups.

- 1.7.4 Compression test setups and procedures shall be in accordance with ASTM D-1143. The Contractor shall provide a calibrated load cell and a calibrated hydraulic ram for measuring loads. The lower measured load of the two methods shall govern the test. The contractor shall provide the dial gages to measure pile movements. The Owners representative shall direct the loading procedure, record the movement data and interpret the test results.
- 1.7.5 The compression test shall be conducted according to paragraph 5.6 (quick load test method) and paragraph 5.2 (cyclic loading) of ASTM D-1143. Hold the 200 percent test load for at least 60 minutes, and until the creep rate is 0.01 inches per hour or less. The test pile shall not settle more than 1.0 inch under the 200 percent test load.
- 1.7.6 Tension tests shall be conducted according to paragraph 7.7 using the cyclic option in paragraph 7.3 of ASTM D-3689 to 200 % of the design load. The maximum test load shall be held for a minimum of 15 minutes. The test pile shall not move upward more than ½ inch under the maximum test load.
- 1.7.7 Lateral load tests shall be conducted according to paragraph 6.3 of ASTM-D3966, the cyclic loading procedure. The lateral deflection under the 200% test load shall not exceed 3/4 inch. After completing the loading cycle under paragraph 6.3, conduct a lateral load test of 300% of the design load according to Paragraph 6.2, loading in excess of the standard test load.
- 1.7.8 The production piles shall be installed to the same injection pressures and resistance criteria as the successful test piles.

1.8 Owner's Representative Responsibilities

- 1.8.1 The Owner's representative shall be responsible for quality assurance of the piling installation including:
 - 1.8.1.1 Observing that all piles are installed to auger refusal on or in rock,
 - 1.8.1.2 Full-time observation of the piling construction process to determine if pile continuity is being achieved,

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- 1.8.1.3 Performing grout slump tests, preparing test specimens, and conducting strength tests of grout,
- 1.8.1.4 Providing technical guidance for the pile load tests, interpretation of the load test results, and preparation of the load test reports,
- 1.8.1.5 Reviewing the contractors grout design test results, electronic data recording records, and submittals, and
- 1.8.1.6 Preparation of records of construction.

1.8.2 The presence of the owner's representative shall not relieve the contractor of the responsibility to install all piles correctly and in accordance with the contract requirements.

1.9 Payment

- 1.9.1 The cost of mobilization and demobilization including grout design testing and reporting shall be a Lump Sum.
- 1.9.2 The cost of each satisfactory 18-inch diameter augercast pile shall include the materials, equipment and labor necessary to auger pile holes, pump holes with grout to the top elevation, place reinforcement, and reports of construction records. Piles will be compensated at the unit price per lineal foot below top elevation including reinforcement.
- 1.9.3 The cost of predrilling through reinforced concrete, steel, or other obstructions in the fill shall include the materials, equipment and labor necessary to advance and maintain an open hole through the obstructions for the cumulative length of the obstructions at each pile. Drilling of obstructions shall be compensated at the unit price per lineal foot for the cumulative length of obstructions, exclusive of the lengths of drilling above and between obstructions. Drilling above and below obstructions are included in the unit price of augercast piles.
- 1.9.4 The cost of each load test shall include the materials, equipment, calibrations, and labor necessary to set up and conduct the load tests. Load tests shall be compensated at a Lump Sum per test, for each test type.

END OF SPECIFICATION

APPENDIX F
DRILLED SHAFT FOUNDATION AT WALL

Barry Newman

From: Kaiser, Tim [TKaiser@hatch.ca]
Sent: Monday, December 12, 2011 1:56 PM
To: Barry Newman
Cc: Client - US Steel - Bencho, John; Bob Bruhn
Subject: RE: USS Clairton Quench Tower piping plan
Attachments: Pipe Support Concept.pdf

Hi Barry

After reviewing the pipe routing with USS some concerns were identified. On one side of the pipe supports is the coke track and on the other side of the support is the breeze truck road. The breeze truck road can not be closed for more than 3 to 4 hours at a time. Also the track is very close to the foundation. USS will isolate as much of the track as possible to allow us to work but there is at least one of the supports that will restrict them to the point where they will have to be constantly moving a single car in and out from under the screening station. This will drastically impede production. Our challenge is to identify a foundation system where we can install the foundation while keeping closures to only a few hours and where the trucks will not adversely affect the concrete while it cures.

My thought on this is to core or demo the existing retaining wall only to the extent necessary and install a drill concrete pier. If you have any other ideas, please let me know what they may be. Other than that can you please let me know the size of the drilled pier I will need and how deep I will need to go with it to resist the applied loads.

I have attached a sketch to show the support concept and the applied loads. The 2 load cases on the sketch are unfactored loads and includes gravity, thermal and wind.

I need to pass these foundations onto my contractors Thursday morning so that they can estimate the construction cost for me. I know you have other things going on but if you could turn this around quickly it would be greatly appreciated.

You should also include this in the geotech report.

If you have any questions, please don't hesitate to call. My number is 412-497-2145.

Thanks

Tim Kaiser

CASE 1: $P = 3700 \text{ lbs}$
 $H = 584 \text{ lbs}$
 $M = 8850 \text{ ft.-lbs.}$
 $e = 15.2'$

CASE 2: $P = 2700 \text{ lbs}$
 $H = 402 \text{ lbs}$
 $M = 9800 \text{ ft.-lbs}$
 $e = 24.4'$

